## College of the Holy Cross <br> CrossWorks

## 2005-2006 Catalog

College of the Holy Cross

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## College of the Holy Cross

## Mission Statement

The College of the Holy Cross is, by tradition and choice, a Jesuit liberal arts college serving the Catholic community, American society, and the wider world. To participate in the life of Holy Cross is to accept an invitation to join in dialogue about basic human questions: What is the moral character of learning and teaching? How do we find meaning in life and history? What are our obligations to one another? What is our special responsibility to the world's poor and powerless?

As a liberal arts college, Holy Cross pursues excellence in teaching, learning, and research. All who share its life are challenged to be open to new ideas, to be patient with ambiguity and uncertainty, to combine a passion for truth with respect for the views of others. Informed by the presence of diverse interpretations of the human experience, Holy Cross seeks to build a community marked by freedom, mutual respect, and civility. Because the search for meaning and value is at the heart of the intellectual life, critical examination of fundamental religious and philosophical questions is integral to liberal arts education. Dialogue about these questions among people from diverse academic disciplines and religious traditions requires everyone to acknowledge and respect differences. Dialogue also requires us to remain open to that sense of the whole which calls us to transcend ourselves and challenges us to seek that which might constitute our common humanity.

The faculty and staff of Holy Cross, now primarily lay and religiously and culturally diverse, also affirm the mission of Holy Cross as a Jesuit college. As such, Holy Cross seeks to exemplify the longstanding dedication of the Society of Jesus to the intellectual life and its commitment to the service of faith and promotion of justice. The College is dedicated to forming a community that supports the intellectual growth of all its members while offering them opportunities for spiritual and moral development. In a special way, the College must enable all who choose to do so to encounter the intellectual heritage of Catholicism, to form an active worshipping community, and to become engaged in the life and work of the contemporary church.

Since 1843, Holy Cross has sought to educate students who, as leaders in business, professional, and civic life, would live by the highest intellectual and ethical standards. In service of this ideal, Holy Cross endeavors to create an environment in which integrated learning is a shared responsibility, pursued in classroom and laboratory, studio and theater, residence and chapel. Shared responsibility for the life and governance of the College should lead all its members to make the best of their own talents, to work together, to be sensitive to one another, to serve others, and to seek justice within and beyond the Holy Cross community.


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## Academic Calendar 2005-2006

## Fall 2005 Semester

Saturday
Sunday
Monday
Tuesday
Wednesday
Monday
Wednesday
Friday
Monday
Tuesday
Wednesday
Thursday
Monday \& Tuesday
Wednesday
Thursday \& Friday
Monday \& Tuesday
Thursday \& Friday
Tuesday
Monday
Wednesday
Saturday
Saturday

August 27
August 28
August 29
August 30
August 31
September 5
September 7
September 16
October 10
October 11
October 26
November 3
November 7 \& 8
November 9
November 10 \& 11
November 14 \& 15
November 17 \& 18
November 22
November 28
December 7
December 10
December 17

First Year students arrive.
Mass of the Holy Spirit
Orientation
First Year Student Advising
Orientation
CLASSES BEGIN
Labor Day; classes will be held
Add/drop ends; last day to declare an audit
Last day to declare P/NP
Columbus Day. NO CLASSES
NO CLASSES
Advising for Spring 2006 begins
Advising for Spring 2006 ends
Fourth Year Students enroll
Last day to withdraw from a class with a W
Third Year Students enroll
Second Year Students enroll
First Year Students enroll
Thanksgiving recess begins after last class
Classes resume; open enrollment begins
Study period begins
Final examinations begin
Final examinations end

## Spring 2006 Semester

Monday
Tuesday
Wednesday
Wednesday
Friday
Friday
Monday
Wednesday
Monday
Tuesday
Wednesday
Tuesday
Tuesday \& Wednesday
Thursday \& Friday
Monday \& Tuesday
Monday
Wednesday
Saturday
Saturday
Thursday
Friday

January 16
January 17
January 18
January 25
February 3
March 3
March 13
March 29
April 3
April 11
April 12
April 18
April 18 \& 19
April 20 \& 21
April 24 \& 25
May 1
May 3
May 6
May 13
May 25
May 26

Martin Luther King Holiday
Advising
CLASSES BEGIN
Add/drop ends; last day to declare an audit
Last day to declare P/NP
Spring vacation begins after last class
Classes Resume
Last day to withdraw from a class with a W
Advising for Fall 2006 begins
Advising for Fall 2006 ends
Easter recess begins after last class
Classes Resume
Rising Fourth Year Students enroll
Rising Third Year Students enroll
Rising Second Year Students enroll
Open enrollment begins
Study period begins
Final examinations begin
Final examinations end
BACCALAUREATE EXERCISES
COMMENCEMENT

## The College of the Holy Cross: Profile

One of the best liberal arts colleges in the United States, Holy Cross is highly respected for its superior undergraduate academic programs, accomplished faculty, and the intelligence, imagination, and achievements of its students. It is also renowned for its strong, well-supported and enthusiastic commitment to the principle of educating men and women for others, in a community that generates a strong feeling of belonging and a vital sense of loyalty.

As a Jesuit college, Holy Cross takes its place in a 450-year tradition of Catholic education that has distinguished itself for intellectual rigor, high academic standards, and religious and moral sensitivity. Academic life at Holy Cross is serious and challenging; it is also exciting. This excitement is one of discovery: students discovering new things in literature, science, the arts, mathematics, and religion; professors discovering new things through their research, in their laboratories, and in the libraries. Student-professor exchanges in the classroom, as well as in countless informal settings, are at the center of academic life at Holy Cross. Because the student body is 100 percent undergraduate and relatively small, the opportunity for individual attention is readily available. Students know their professors. Professors know and take a genuine interest in their students.

The College recognizes that its professional and talented faculty members constitute the particular ingredient that ultimately shapes the educational experience. They are widely respected in their academic specialties. Many have national reputations for their research and publications, creative performances, recordings, and exhibitions. Almost all of the nearly 280 full- and parttime faculty members hold doctoral degrees from some of the finest universities here and abroad. They conduct research supported by grants from foundations, government agencies, and private sources.

Holy Cross faculty members also are dedicated to excellence in teaching and to service. They strike an appropriate balance between the transmission of knowledge and the investigation of new ideas. This ensures that the classroom is vital and that scholarly research is meaningful. It is the faculty that leavens the whole and is largely responsible for the reputation of Holy Cross as an excellent liberal arts college.

Holy Cross is a place to learn how to learn, and not a place to seek job training. The fundamental purpose of the College is not to train students for specific occupations, but to inform the mind and to foster clear thought and expression through the balanced study of the arts and the sciences.

A distinguishing and all-important characteristic of education at Holy Cross is the emphasis placed upon the service of faith and the promotion of justice. As a Jesuit college, the cultivation of intellectual, social, religious, and ethical refinement is not an end in itself. Rather, this means educating young people to be truly concerned about human welfare, about making our economies more just, and about placing men and women in public office who are honest and honorable. It has as its purpose the education of men and women who in their family life will be examples of Catholic ideals and practice and who will be leaders in their parishes and in their communities.

## Founding

The oldest Catholic college in New England, Holy Cross was founded in 1843 by the second bishop of Boston, Benedict Joseph Fenwick, S.J., who gave it the name of his cathedral, the Cathedral of the Holy Cross, along with the seal and motto of the Diocese of Boston.

From the start, the Bishop entrusted the direction of the College to the Fathers of the Society of Jesus. The beginnings were very modest: one wooden building, a halfffinished brick structure, and 52 acres of land.

Today the College is a large educational complex, complete with chapel, libraries, a modern
science center, classrooms, residence halls, football stadium, hockey rink, and campus activity center, spread over 174 sloping acres. It is a community of 2,700 students, roughly half of them men and half women. Few classes exceed an enrollment of 40 , and most average 18-20. The atmosphere this community of scholars creates is frequently described as welcoming and friendly, where students receive encouragement and support from classmates and professors.

Coeducational since 1972, Holy Cross enrolls a student body of young men and women of proven accomplishment. Almost all of them have been graduated in the top 20 percent of their high school classes. Most live in 10 residence halls on campus. These are run by the Dean of Students Office with the help of students who organize the many activities through their House Councils. Students, elected by their peers, represent their classmates at faculty meetings, on major College committees, and in a consultative capacity on the appointment and promotion of faculty.

## Accreditation

The College of Holy Cross is accredited by the New England Association of Schools and Colleges. Additionally, the Theatre Department is accredited by the National Association of Schools of Theatre.

## The Academic Program

The Vice President for Academic Affairs and Dean of the College oversees the academic program at Holy Cross. The Dean is assisted by the Associate Deans of the College, the Class Deans, the Registrar, the Director of Academic Services \& Learning Resources, and advisors from special academic programs.

The Class Deans are responsible for monitoring the academic progress of students in their respective classes and for coordinating the College's academic advising program.

The Registrar's Office maintains student records. Services include enrollment, registration, processing transcript requests, and classroom management. The office also verifies student enrollment for insurance companies, veteran's benefits, and loan deferments.

The Office of Academic Services \& Learning Resources offers academic advising and academic support services, including assistance in learning skills and planning for a major. The office encourages Holy Cross students to take advantage of services such as the Writer's Workshop and peer tutoring programs (in calculus, chemistry, classics, economics, music, physics, and Spanish), which are overseen by faculty in various academic departments.

## General Requirements

Holy Cross offers a curriculum leading to the Bachelor of Arts (A.B.) degree. The successful completion of 32 semester courses in eight semesters of full-time study is required for graduation.

To qualify for a degree from the College, at least one half of a student's courses, including the two full semesters of the fourth year, must be completed at the College of the Holy Cross. Students are permitted, however, to participate in Holy Cross programs, such as the Washington Semester, Semester Away and Study Abroad, in the first semester of their fourth year.

Each student's curriculum consists of common requirements, a major, and freely elected courses. In designing their curriculum, students are limited to a total of three programs combining majors, minors, and concentrations, only two of which can be majors.

## Common Requirements

All students are required to complete courses in the areas of the curriculum described below. Each of these areas represents a basic mode of inquiry, or way of knowing the world. To enter into and engage with these different areas-to see them as parts of a larger whole-is essential to becoming a liberally educated person. These requirements are thus meant to provide students with the opportunity to explore basic modes of inquiry and to encourage them to develop a reflective attitude with regard to different ways of knowing and the bodies of knowledge associated with them. Taken together, these areas of study reflect the College's understanding of the foundation of a liberal arts education.

Students are able to select from a range of courses that fulfill each of the requirements. These courses offer an enriching and exemplary introduction to the methods and content of a broad area of inquiry, giving students a sense of what is distinctive about each area, the kinds of questions it asks and the kinds of answers it provides. Such courses should lead to an awareness of both the possibilities an area of study presents and the limitations it confronts. Guided by these requirements, all Holy Cross students should come to appreciate the complexity of what it means to know as well as the interrelatedness of different ways of knowing, thereby acquiring the basis for an integrated academic and intellectual experience. Students are therefore encouraged to think carefully, in consultation with their advisors, about the courses they take to fulfill these common requirements.

The requirements include one course each in Arts, Literature, Studies in Religion, Philosophical Studies, Historical Studies, and Cross-Cultural Studies; and two courses each in Language Studies, Social Science, and Natural and Mathematical Sciences. No more than two courses from a single academic department may be counted toward fulfillment of the common requirements, except that students may take a third common requirement course in the same department where the Language Studies requirement is fulfilled.

## The Arts and Literature

The Arts and Literature are concerned with the study of aesthetic forms as expressions of meaning, as vehicles for exploring the nature of reality, as sources of beauty, and as objects of knowledge and critical scrutiny.

In studying the arts-the visual arts, music, theatre, dance, and film-there is the opportunity to explore ways of knowing and universes of expression beyond the essentially cognitive or discursive. A distinctive feature of the arts is the relationship between form and content: meaning is conveyed by both the medium and the subject matter of the work. Central to the study of the arts is the development of one's understanding, appreciation, and critical capacity in encountering particular works and genres as well as one's awareness of both the limits and possibilities of the creative imagination. Courses in this area, whether historical or contemporary in approach, interpretive or oriented toward practice, seek to foster a recognition of the distinctive role of the arts in culture, in liberal education, and in the enrichment of the human condition.

In studying literature, there is an opportunity to explore the multiple ways in which the spoken or written word may disclose features of life that might otherwise remain unarticulated and thus unknown. Critical reading and writing are fundamental to literary study. Specific features of literary study include analysis of literary form and technique, examination of the relationship between literary works and so$\mathrm{cial} /$ historical context, and exploration of methodological and theoretical perspectives on literary inquiry. More generally, the study of literature highlights the communicative, expressive, and revelatory power of language itself. Courses in this area therefore have as their main focus those works that, through their special attention to language, serve both to inform and to transform readers.

Students are required to complete one course in the Arts and one course in Literature.

## Studies in Religion and Philosophical Studies

As indicated in the College's Mission Statement, "critical examination of fundamental religious and philosophical questions" is essential to a liberal arts education in the Jesuit tradition. As areas of common inquiry, studies in religion and philosophical studies provide an invitation to dialogue about such questions, furthering the search for meaning and value at the heart of intellectual life at Holy Cross.

Studies in Religion address the search for ultimate meaning by exploring such themes as the nature of the sacred, the relationship between the human and the divine, and the spiritual dimension of human existence. Against the backdrop of this search, studies in religion also address questions about the responsibilities human beings owe to each other and to their communities, the cultural significance of religious beliefs and practices, as well as the personal and social nature of religious experience. Courses in this area include the study of indigenous religions as well as major religious traditions of the worldi.e., Judaism, Christianity, Islam, Buddhism, Hinduism, Confucianism and Daoism; religious ethics; the analysis and interpretation of sacred texts; and the study of Catholic theology and spirituality.

Philosophical Studies explore fundamental questions about the nature of reality and what it means to be human, truth and knowledge, ethical values, aesthetic experience, and religious belief. The aim of philosophical inquiry is to wonder about what is taken for granted by the theoretical and practical frameworks upon which we ordinarily rely. Such inquiry seeks, in a variety of ways, to arrive at a comprehensive understanding of the world and our place in it. By reflecting on matters essential to all disciplines, philosophical studies can help students to see their education as forming an integrated whole. Since it is a vital feature of philosophical inquiry that it wonders about its own goals and methods, courses in this area should allow for this kind of reflection as well. Such courses may be either topical or historical in approach, focusing on fundamental questions or the different ways of thinking about those questions that have emerged over time.

Students are required to complete one course in Studies in Religion and one course in Philosophical Studies.

## Historical Studies

Historical Studies involve systematic inquiry into the human past. Historians use primary and secondary
sources to analyze and reconstruct the past and to explore the relevance of the past to the present. Historical studies may focus on the interpretation of broad changes over time as well as particular moments, events or social conditions in their wider historical context. Studying history also involves the study of historians, their writings and their influence on our current understanding of the past. Courses in this area provide students with historical perspective by introducing them to a significant segment of human history and by teaching them to locate and use evidence in evaluating the historical interpretations of others.

Students are required to complete one course in Historical Studies.

## Cross-Cultural Studies

Cross-Cultural Studies seek to stimulate critical reflection on the theoretical, methodological, and ethical issues involved in encountering other cultures and to help students to think systematically about the fundamental assumptions underlying cultural differences. In light of this task, courses in this area often explore non-Western structures of social organization, artistic expression, meaning, and belief. Given the complexity of the Western tradition, however, courses that explore deep cultural differences within this tradition can also serve to raise significant issues of cross-cultural analysis. By challenging one to understand different world-views, cross-cultural inquiry provides an opportunity to understand more fully-and perhaps to transcend-one's own cultural presuppositions.

Students are required to complete one course in Cross-Cultural Studies.

## Language Studies

Language Studies involve the study of languages other than one's own. Such study contributes to an awareness of cultural differences that are shaped by and reflected in language. The study of modern languages allows students to develop the ability to communicate with people of different cultures through speech or writing. The study of classical languages also enhances students' general understanding of different cultures through the medium of written texts. In all cases, the study of another language contributes to a greater understanding of one's own language, and to a fuller appreciation of the role of language and literature in human experience and thought.

Students are required to complete two courses in the study of a language other than one in which they possess native speaker fluency.

Students continuing the study of a language begun prior to college will pursue their study of that language at a level commensurate with their language skills. Placement into the appropriate level will be determined by the language department or program concerned, based on their evaluation of prior coursework, tests, and consultation with the student. Students choosing to begin the study of a new language at Holy Cross must complete both semesters of an introductory language course.

## Social Science

The Social Sciences investigate human behavior and the structures, institutions, and norms operative in social life. Their main objectives are to identify, through empirical and systematic observations, both universal and particular patterns of human behavior and to explain or interpret human relationships, cultures, and social phenomena. Courses in this area provide a broad and substantial introduction to basic concepts of social scientific inquiry. These courses are designed to offer an opportunity to reflect on the methodological assumptions and theoretical foundations of social science in its various forms, including anthropology, economics, political science, psychology and sociology.

Students are required to complete two courses in Social Science.

## Natural and Mathematical Sciences

Natural Science is the systematic investigation of living and nonliving aspects of the physical universe. Its methods of investigation involve the observation, description and classification of broad patterns
in nature and the testing of hypotheses that provide tentative explanations of the processes underlying these patterns. The traditional goal of natural scientific inquiry is to explain a large array of natural phenomena using a small number of theories valued in many cases for their predictive power. The measurement and demonstration of quantitative relationships and the development of abstract models is often fundamental to this enterprise. Courses in this area provide the opportunity to explore natural science directly, focusing on the process of scientific discovery through the use of experimental and theoretical methods of investigation.

Mathematical Science gives structure to and explores abstractions of the human mind. In addition, it often provides natural science with models on which to build theories about the physical world. Computer science, the study of algorithms, data structures, and their realizations in hardware and software systems, is also included in this area. Computer science addresses the fundamental questions: What is computable in principle, and what tasks are algorithmically feasible? Courses in this area encourage the development of logical thinking, quantitative reasoning, and general problem-solving skills. Such courses also seek to foster an appreciation for mathematical thought as a fundamental mode of inquiry in its own right.

Students are required to complete two courses in this area, at least one of which must be in Natural Science.

## Majors

Students must fulfill the requirements of a major, which must be declared before the enrollment period preceding the third year. A major normally consists of a minimum of 10 and a maximum of 14 courses selected from a group of courses within a department. Certain courses, however, may not count toward the minimum or maximum number of courses in a given department, and some departments require additional courses in allied fields. More details about the requirements of individual majors are found in later sections of this catalog under the corresponding departmental descriptions.

Students who exceed the maximum number of courses in a major incur a deficiency for every course above the maximum. Deficiencies may be satisfied by AP credit, courses transferred to Holy Cross from other institutions, and fifth courses taken for letter grades.

The following majors qualify for the Bachelor of Arts degree: anthropology, biology, chemistry, classics, computer science, economics, economics-accounting, English, French, German, history, Italian, mathematics, music, philosophy, physics, political science, psychology, religious studies, Russian, sociology, Spanish, studies in world literatures, theatre, visual arts: history, and visual arts: studio. Information on student-designed Multidisciplinary Majors appears in the section of the Catalog on the Center for Interdisciplinary and Special Studies. Students are expected to confirm their plans for the fulfillment of major and degree requirements with the designated faculty advisor.

## Electives

In addition to the common requirements and a major, students pursue free electives. There are several curriculum options available at the College to assist students in organizing their elective program. In addition to double majors and minors, described here, students are encouraged to familiarize themselves with the academic options listed under Special Academic Programs and the Center for Interdisciplinary and Special Studies. Students are limited to three program options, only two of which may be majors.

## Double Major

A double major is one of the curriculum options available at the College. Students desiring doublemajor status must receive the approval of the Chairs of the departments the student is entering, the academic advisor, and the Class Dean. An application for double-major status must receive approval no later than the enrollment period for a student's sixth semester, except in those cases where a student
spends the fifth semester away from campus. In those cases, approval must be obtained prior to the completion of enrollment during the semester the student returns to campus. Students with doublemajor status are restricted to taking the minimum number of courses necessary to complete each major, or 10 courses in each major, whichever is higher. Students who exceed these limits incur a deficiency for every course above the maximum. Deficiencies may be satisfied with AP credit, courses transferred to Holy Cross from other institutions, or fifth courses taken for letter grades.

## Minors

Minors are available in anthropology, chemistry, computer science, economics, economics-accounting, French, German, Italian, philosophy, physics, Russian, visual arts: history, and visual arts: studio. Students are not required to have a minor field of study but are invited to consider such an option in designing their undergraduate curriculum. Typically, the minor consists of six courses, some of which are required and some of which are selected by students in consultation with an advisor. For information on the requirements for completion of minors, see the departmental descriptions later in the Catalog. Information on student-designed Multidisciplinary Minors appears in the section of the Catalog on the Center for Interdisciplinary and Special Studies.

## Advanced Placement

Holy Cross participates in the College Board Advanced Placement Program and the International Baccalaureate Program. One unit of credit is awarded for an Advanced Placement score of 4 or 5 in any discipline recognized by the College. One unit of credit is awarded for a score of 6 or 7 on a Higher Level International Baccalaureate Examination, again in a liberal arts subject. AP and IB credit may be used to satisfy deficiencies and common area requirements. Each academic department has its own policy regarding the use of AP or IB credit for placement in courses and progress in the major. See departmental descriptions for further information.

## Granting College Credit

Holy Cross will grant college credit for courses taken in high school provided: 1) they are taken at an accredited college or university (i.e., on the campus), or 2 ) they are taught at the high school by a full-time faculty member of an accredited college or university, and 3) they are worth at least three-semester hours of credit. College courses taken during high school may be used to remove deficiencies incurred during the student's enrollment at Holy Cross.

A final grade of B or better is required and the courses must be similar in rigor and content to those normally offered at Holy Cross. Complete descriptions of each course for which the student is requesting credit must be forwarded to the Class Dean. Approval for credit rests with the Class Dean in consultation with the appropriate Department Chair at Holy Cross.

## Early Graduation

Incoming first-year students who have received credit for four (or eight) college-level courses may request early graduation. These credits may be a combination of transfer, Advanced Placement, and International Baccalaureate credit, but must include at least one college course. A request for early graduation should be based on the following supportive grounds:

1. Evidence of serious consideration as to the desirability of an accelerated degree program and the counsel and encouragement of a faculty advisor and the Class Dean in planning the scope and the sequence of future coursework;
2. A distinguished record of academic achievement during the first year.

Requests for an accelerated-degree program must be submitted during the first year. Final approval will not be granted until after the completion of the first year. Students should submit requests to the Class Dean. A final decision in the matter of early graduation rests with the Dean of the College.

## Transfer Courses

Courses taken by current Holy Cross students at other colleges and universities may be accepted in transfer: 1) if they satisfy degree requirements, that is, if they are used to remove deficiencies or to fulfill major or common requirements; or 2 ) if they satisfy requirements for College-sponsored academic programs, that is, if they satisfy requirements for minors, concentrations, or the premedical program. Distance learning courses (correspondence and internet courses) are not transferable.

In addition, College policy stipulates the following:

1. Courses taken at other institutions by students currently matriculating at Holy Cross may not be used to advance class standing.
2. Transfer courses must be approved by the Class Dean. The appropriate Department Chair must approve courses to satisfy requirements for majors, minors, and concentrations.
3. Only grades of C or better, earned in courses taken at an accredited institution, will be accepted by the College.
4. Transfer courses must carry the equivalent of at least 3 semester hours of credit.

Students who anticipate taking courses elsewhere for credit must obtain a Permit to Attend another Institution from the Registrar or Class Dean.

## Transfer Students

Holy Cross will accept a maximum of four full semesters of credit for students who transfer to Holy Cross from other colleges or universities. To earn a Holy Cross degree, students are expected to complete a minimum of four full semesters (and 16 letter-graded courses) at Holy Cross or in a Holy Cross program. These four semesters must include the two of senior year.

## The Advisory Program

The Class Deans are responsible for coordinating the College's academic advising program. Holy Cross provides each student with a faculty advisor who assists the student with curriculum planning and course selection. The assignment of the advisor is made in the summer prior to enrollment. During the first two years, students may be advised by faculty outside their major department. Students entering the third and fourth year will have faculty advisors in their major department. The Office of Academic Services \& Learning Resources provides additional academic advising for students across the College.

## Enrollment

Information and instructions concerning enrollment are distributed by the Office of the Registrar to all students approximately one month in advance of the beginning of each semester.

Enrollment in courses takes place beginning in the preceding semester. Students are not permitted to make changes in their course schedules after the first week of classes. Withdrawal from a course will be permitted during the first 10 weeks of the semester with the grade of W . The W grade is not included in the calculation of the GPA.

Failure to comply with the procedures specified by the Registrar for enrollment, changes of course schedule, and withdrawal from a course may result in either denial of credit or failure in the course.

## Student Attendance at Class

Students registered in a course are expected to attend class regularly and to fulfill all obligations of the course as outlined by the professor. During the first week of the semester, professors generally announce, orally or by distributed outlines, the course requirements and methods of evaluation, including their policy on attendance and class participation. If this information is not given, students should request it.

In cases of unforeseen absence (e.g., because of illness), students should contact the professor as soon as they are able. Arrangements for foreseen absences (e.g., participation in college-sponsored athletic events) should be made with the professor well in advance of the anticipated absence. Most faculty will make accommodations for students who miss class for compelling reasons. All faculty have full authority to make whatever arrangements they think reasonable.

Some professors may require an excused absence from the Class Dean. Deans can excuse a student's absence for compelling and verifiable reasons, including illness, a death or medical emergency in the family, a wedding in the immediate family, and participation in a college-sponsored athletic event. To obtain an excused absence, students should notify the appropriate Class Dean and provide verification of the grounds for the excused absence. Verification can be provided by the Department of Athletics, Chaplain's Office, Counseling Center, Office of the Dean of Students, Health Services, a private physician, or the student's family.

Unless excused by the faculty member or the Class Dean, absences may result in an academic penalty. Although students may not be failed in a course exclusively on the basis of unexcused absence from class, their attendance and participation obviously have bearing on the professor's assessment of their academic progress. Attendance and class participation may be used, therefore, in the calculation of final grades.

Students who are unable, because of religious beliefs, to attend classes or participate in any examination, study, or work requirement on a particular day shall be excused and provided with an opportunity to make up such examination, study, or work requirement, provided this does not create an unreasonable burden upon the College. No fees of any kind shall be charged for making available to students such opportunity. No adverse or prejudicial effects shall result to students because they availed themselves of these provisions. Students are asked to contact the appropriate Class Dean in advance of an absence due to religious belief.

Students should remember that it is always their responsibility to make up any material they may have missed during an absence from class.

## Academic Honesty Policy

All education is a cooperative enterprise between teachers and students. This cooperation requires trust and mutual respect, which are only possible in an environment governed by the principles of academic honesty. As an institution devoted to teaching, learning, and intellectual inquiry, Holy Cross expects all members of the College community to abide by the highest standards of academic integrity. Any violation of academic honesty undermines the student-teacher relationship, thereby wounding the whole community. The principal violations of academic honesty are plagiarism, cheating, and collusion.

Plagiarism is the act of taking the words, ideas, data, illustrative material, or statements of someone else, without full and proper acknowledgment, and presenting them as one's own.

Cheating is the use of improper means or subterfuge to gain credit or advantage. Forms of cheating include the use, attempted use, or improper possession of unauthorized aids in any examination or other academic exercise submitted for evaluation; the fabrication or falsification of data; misrepresentation of academic or extracurricular credentials; and deceitful performance on placement examinations. It is also cheating to submit the same work for credit in more than one course, except as authorized in advance by the course instructors.

Collusion is assisting or attempting to assist another student in an act of academic dishonesty.
At the beginning of each course the teacher should address the students on academic integrity and
how it applies to the assignments for the course. The teacher should also make every effort, through vigilance and through the nature of the assignments, to discourage and prevent dishonesty in any form.

It is the responsibility of students, independent of the teacher's responsibility, to understand the proper methods of using and quoting from source materials (as explained in standard handbooks such as The Little Brown Handbook and the Harbrace College Handbook), and to take credit only for work they have completed through their own individual efforts within the guidelines established by the teacher.

The faculty member who observes or suspects academic dishonesty should first discuss the incident with the student. The very nature of the faculty-student relationship requires both that the faculty member treat the student fairly and that the student respond honestly to the teacher's questions concerning the integrity of his or her work.

If the teacher is convinced that the student is guilty of academic dishonesty he or she shall impose an appropriate sanction in the form of a grade reduction or failing grade on the assignment in question and/or shall assign compensatory course work. The sanction may reflect the seriousness of the dishonesty and the teacher's assessment of the student's intent. In all instances where a teacher does impose a grade penalty because of academic dishonesty, he or she must submit a written report to the Chair of the department and the Class Dean. This written report must me submitted within a week of the faculty member's determination that the policy on academic honesty has been violated. The Class Dean will then inform the student in writing that such a charge has been made and of his or her right to have the charge reviewed.

The student's request for a formal review must be submitted in writing to the Class Dean within one week of the notification of the charge by the Class Dean. The written statement must include a description of the student's position concerning the charge by the teacher. A review panel consisting of a Class Dean, the Chair of the department of the faculty member involved (or a senior member of the same department if the Chair is the complainant), and an additional faculty member selected by the Chair from the same department, shall convene within two weeks to investigate the charge and review the student's statement, meeting separately with the student and the faculty member involved. The Chair of the complainant's department (or the alternate) shall chair the panel and communicate the panel's decision to the student's Class Dean. If the panel finds by majority vote that the charge of dishonesty is supported, the faculty member's initial written report to the Class Dean shall be placed in the student's file until graduation, at which time it shall be removed and destroyed unless a second offense occurs. If a majority of the panel finds that the charge of dishonesty is not supported, the faculty member's initial complaint shall be destroyed, and the assignment in question shall be graded on its merits by the faculty member. The Class Dean shall inform the student promptly of the decision made.

Each instance of academic dishonesty reported to the Class Dean (provided that the charge of dishonesty is upheld following a possible review, as described above) shall result in an administrative penalty in addition to the penalty imposed by the faculty member. For a first instance of academic dishonesty, the penalty shall be academic probation effective immediately and continuing for the next two consecutive semesters. For a second instance, the penalty shall be academic suspension for two consecutive semesters. For a third instance, the penalty shall be dismissal from the College. Dismissal from the College shall also be the penalty for any instance of academic dishonesty that occurs while a student is under probationary status because of a prior instance of dishonesty. Suspension and dismissal are effective at the conclusion of the semester in which the violation of the policy occurred. Students may appeal a suspension or dismissal for reasons of academic dishonesty to the Committee on Academic Standing, which may uphold the penalty, overturn it, or substitute a lesser penalty. A penalty of dismissal, if upheld by the Committee, may be appealed to the President of the College.

## Written Expression

Students and faculty alike share responsibility for promoting the effective and wise use of language. Language is central to education since it is the chief means by which the transmission and exchange of ideas take place. Nowhere are clarity and precision of language so important or so difficult to achieve as in
writing. Students and faculty ought, therefore, to take special care to encourage excellence in writing.
To achieve this end students should:

1. recognize that they are expected to write well at all times;
2. realize that the way they say something affects what they say;
3. write, revise, and rewrite each paper so that it represents the best work they are able to do.

Similarly, faculty members should:

1. set high standards for their own use of language;
2. provide appropriate occasions for students to exercise their writing skills;
3. set minimum standards of written expression for all courses;
4. acquaint the students with those standards and inform them of their responsibility to meet them and the consequences if they do not;
5. evaluate written work in light of effectiveness of expression as well as content;
6. aid students in their development by pointing out deficiencies in their written work and assist them with special writing problems arising from the demands of a particular field of study.

## Examinations

In-Course Examinations. The number of exams a student takes in a single day should not exceed a total of two. The word exam here refers to mid-term exams and to those major in-course tests that cover several weeks' material and take a whole period or major portion of a period to administer. It does not include routine quizzes based on day-to-day assignments and lasting only part of the period.

Students with more than two in-course exams on a single day may obtain permission from the appropriate Class Dean to make up the exam or exams in excess of two. This permission must be requested in advance of the scheduled examinations.

Students who have missed an in-course test for a serious and verifiable reason (such as personal illness, death in the family, or family emergency) have the right either to a make-up test or an exemption without penalty from the original test, the choice left to the discretion of the professor. Exemption without penalty requires the reweighting of other tests and assignments in the course of the semester.

Faculty may require an excused absence from an in-class examination from the Class Dean. The Class Dean will authorize in writing a student's absence from an in-course exam only for serious and verifiable reasons and only for those who have presented their cause within a reasonable time. Only the professor can provide exemption without penalty from the original test.

Final Examinations. Final examinations are administered during the final examination period at the end of each semester. The schedule of final examinations is established by the Registrar and published during the registration period. Students should consult this schedule before making end-of-thesemester travel plans.

Students who for serious and verifiable reasons are not able to take the scheduled final must make arrangements for a make-up examination. These arrangements may be made directly with the faculty member; the date, time and place of the make-up exam are determined by mutual agreement. Alternatively, students may request an absentee examination. An absentee examination is approved both by the professor and the Class Dean. Ordinarily, the absentee examination is administered on the last day of the examination period. Students unable to take a scheduled final must notify the professor at the earliest possible time. If the professor requires an excused absence, the student must contact the Class Dean.

If a severe storm occurs on a Saturday of the examination period and a faculty member finds it impossible to reach campus to administer a final examination, the examination will be rescheduled on Sunday at the time originally scheduled. If a severe storm occurs on any day Monday through Thursday, the examination is rescheduled to the next day at $6: 30 \mathrm{p} . \mathrm{m}$. If a severe storm occurs on Friday, the examination is rescheduled to Saturday at 2:30 p.m. In all cases, the examination will be held in the originally scheduled room. If an examination must be scheduled to another room, you will be notified by the Registrar's Office.

Please note that the College will not close or postpone scheduled examinations unless the governor
declares a state of emergency. Students are expected to be present for their final examinations. In the event, however, that a severe storm prevents a student from reaching campus to take an examination which the faculty member is present to administer, the student must make arrangements with the faculty member for a makeup or take the missed examination on the regularly scheduled absentee examination day which is the last Saturday of the examination period. It is the absent student's responsibility to find out whether or not the examination was held at the scheduled time so that he or she will know when and where to take the missed examination.

## Grading System

A student's standing will be determined by the results of examinations, classroom work, and assignments. Each semester one grade will be submitted for each course for each student; this will be a composite grade for oral presentations, reading assignments, classroom discussions, tests, the final examination, etc.

There is no official College translation of percentage scores into letter grades. Reports of academic grades are sent to students and to their parents or guardians at the end of each semester.

The following symbols are used to indicate the quality of the student's work in each course:

| Grade Point Multiplier | Symbol | Description |
| :--- | :--- | :--- |
| 4.00 | A | Excellent |
| 3.70 | A- |  |
| 3.30 | B+ | Good |
| 3.00 | B |  |
| 2.70 | B- |  |
| 2.30 | C+ | Satisfactory |
| 2.00 | C |  |
| 1.70 | C- | Low Pass |
| 1.30 | D+ | Failure |
| 1.00 | D |  |
| 0.00 | F |  |
| IP | In Progress |  |
| W | Withdrawal without Prejudice |  |
| AU | Audit |  |
| AB | Absence from Final Examinations |  |
| I | Incomplete |  |
| P | Pass |  |
| NP | No Pass (Failure) |  |
| J | Grade not submitted |  |

The grades of AB and I are changed to F unless a subsequent grade is submitted to the Registrar within one week of the last day of final examinations. Grades of AB and I may be changed to extended incompletes by the appropriate Class Dean upon petition by the faculty member or, after consultation with the faculty member, at the initiative of the Class Deans. Withdrawal from a course, with the approval of the Class Dean, after the add/drop period will be graded W during the first 10 weeks of the semester. Ordinarily students are not permitted to withdraw from a course after the 10th week. The deadline for withdrawal from a course is published by the Registrar at the beginning of each semester.

A student who, during a given semester, has not earned passing letter grades (other than P ) in four courses which count toward the 32 -course graduation requirement incurs a deficiency.

Grade Points. Each of the grades from A to F is assigned a multiplier, as indicated, which weights the grade in computing averages. Multiplying this weighting factor by the number of semester units assigned to the course gives the grade points earned in it.

None of the other grades in the above list carries grade-point multipliers; units associated with such grades are not used in calculating grades.

Grade Point Average. Dividing the total number of grade points achieved in all courses by the sum
of the units assigned to these courses determines the grade point average (GPA). The semester GPA is calculated using units and grade points earned in a single semester; when all the student's units and grade points to date are used, the calculation yields the cumulative GPA.

Only those grades earned in courses taught at Holy Cross (including the courses associated with the Washington Semester Program) and those earned in courses offered through the Colleges of Worcester Consortium are calculated into a student's grade point average. Grades earned in college sponsored programs abroad or in a Study Away Program appear on the Holy Cross transcript but are not calculated into the GPA.

## Retention and Return of Graded Materials

Unless the nature of the examination precludes returning it to the student, all non-final examinations are to be returned with corrections. Students have the right to review any non-final examination that is retained by the professor. Such a review must take place at the time of an appointment made by the student to confer with the professor and should occur shortly after the time when the student receives the grade for the examination.

Final examinations may be returned to the student if the professor is willing and if return is feasible. However, when the final examination is not returned, it shall be retained by the professor until the end of the subsequent semester, so that a student may see and review the examination and discuss any questions concerning its evaluation.

Faculty who will not be at the College in the subsequent semester (because of separation or leave) will deposit with the Department Chair final examinations along with the record of evaluations used to determine students' final grades. The Chair will make the arrangements necessary to allow students to review their final examinations. Any papers or other graded materials not returned to the student are subject to the same provisions as are indicated for final examinations.

## Change of Grade

Faculty may change a final grade submitted to the Registrar. A grade can be changed if the original grade was inaccurately calculated or recorded. However, a grade may not be changed based on additional work by the student after the original grade has been submitted.

Faculty wishing to change a grade should complete a Change of Grade Form, available from the Class Dean or the Registrar. The form requires the signatures of the faculty member, the Chair of the department, and the Class Dean.

## Final Grade Review Policy

Every student has the right to a formal review of a disputed final grade. The initial attempt by a student to resolve a disputed final course grade must be made with the faculty member involved. If a student believes a satisfactory grade explanation has not been obtained from the faculty member, who is at the time teaching at the College, then the student may request a formal grade review through the Class Dean. This request for a formal review of a final course grade must be written and submitted to the appropriate Class Dean no later than the conclusion of the fifth full week of classes in the semester subsequent to the issuance of the grade.

The written statement must include a description of all attempts made by the student to resolve the disputed grade with the faculty member involved and the reason(s) for requesting a formal grade review. The Chair of the department of the faculty member involved shall receive a copy of the student's written request from the Class Dean and review it with the faculty member.

If, after this review, the faculty member believes that the grade should not be changed, within three weeks of receipt of the request for a formal grade review a written statement will be submitted to the stu-
dent, to the Department Chair, and to the appropriate Class Dean that explains the final course grade as issued and responds to the specific reason(s) for which the student has requested a review.

A request for a formal review of a grade given by a Chair in that individual's own course shall be forwarded by the Class Dean to a tenured faculty member of the Chair's department, if available, or, if not available, to a tenured faculty member in a related field, and the same review procedure will pertain.

A request for a formal review shall be forwarded to the Department Chair if the faculty member is no longer teaching at the College.

A student request for a formal review of a final course grade issued by a faculty member who, because of leave, is not teaching at the College in the semester subsequent to the issuance of the grade must be filed in writing with the appropriate Class Dean no later than the fifth week of the following semester. If possible, the review procedure should be concluded by the end of that semester. If the nature of the faculty member's leave makes this impossible, the review procedure should be concluded no later than the third full week of classes after the faculty member has resumed teaching responsibilities.

## Honor Grades

The following criteria determine honor grades:

## Dean's List

Dean's List status requires the passing of four or more courses with no failing grades during the semester and the following GPAs: First Honors: a semester GPA of 3.70 or above; and Second Honors: a semester GPA of 3.50 to 3.69 .

## Graduation Honors

Summa Cum Laude: a cumulative GPA of 3.87 or above; Magna Cum Laude: a cumulative GPA of 3.70 to 3.86; and Cum Laude: a cumulative GPA of 3.50 to 3.69 .

In calculations of the GPA for the Dean's List or for graduation honors, only those units and quality points earned at Holy Cross and the Colleges of Worcester Consortium are included.

## Fifth Course

Students, after consulting with their faculty advisor, may take a fifth course without charge. The following policies are in effect with regard to the fifth course:

1. Enrollment in a fifth course takes place during the first week of classes each semester.
2. A fifth course may be used by students for enrichment purposes or for the removal of a course deficiency. In the latter case, the fifth course must be taken for a letter grade.
3. Students must have a cumulative GPA of at least 2.00 in order to register for a fifth course.
4. First-year students must obtain permission from the appropriate Class Dean before registering for a fifth course.
5. A fifth course taken for a letter grade will be included in the calculation of the cumulative average.

## Pass/No Pass Grading

The grades of P and NP are the Pass/No Pass grades. The option of Pass/No Pass grading is available only for those students taking five courses in a semester.

Following are the qualifications for the Pass/No Pass Option:

1. Students who wish to take a course on a Pass/No Pass basis shall have until the third Friday of the semester to decide which of the five courses chosen during the registration period is to be taken on the Pass/No Pass basis. A special Pass/No Pass form available in the Offices of the Class Dean and the Registrar must be completed and filed with the Registrar during the period designated for the declaration of the Pass/No Pass option.
2. Pass/No Pass courses do not count toward the 32 courses required for graduation.
3. Pass/No Pass courses cannot be used to remove deficiencies.
4. Courses taken on a Pass/No Pass basis may be used to satisfy common requirements.
5. Pass/No Pass courses may be taken within the student's major, minor, or concentration but cannot be used to fulfill the requirements of these programs.
6. Pass/No Pass grades will not be averaged into a student's GPA but will be placed on the student's record.
7. If, during the first 10 weeks of the semester, a student withdraws from any of the four courses taken for a letter grade, a Pass/No Pass registration in the fifth course will be converted automatically to a letter-grade course registration.

## Auditing Courses

Degree students may elect to audit a course only if they are enrolled in four other courses for credit in a semester. They must complete an audit form obtained from the Class Dean or the Registrar's Office by the end of the registration period at the beginning of each semester. The audit will appear on the transcript but no academic credit will be given nor may the audit be converted later into a grade with credit. An audited course cannot fulfill common requirements.

In order to receive an audit, students must fulfill attendance requirements and all other conditions set forth by the instructor.

Degree students are not charged for auditing a course. Special students are charged the same tuition as they are when registering for credit.

## Transcript of College Record

An official transcript of the College record will be issued by the Office of the Registrar only with the written consent of the student. Transcript requests will not be accepted by telephone. A transcript is official when it bears the impression of the Seal of the College and the signature of the Registrar of the College. The transcript fee for current students is two dollars per copy; for former students the fee is three dollars. An official transcript may be withheld by appropriate college officials in cases where a financial obligation remains.

## Academic Probation

There are two forms of academic probation. Students may be placed on academic probation for a first instance of academic dishonesty and for failure to achieve the required grade point average.

## Probation and Violation of the Academic Honesty Policy

Students are placed on probation for a first instance of academic dishonesty. Probation continues for two full semesters following the violation. As soon as students are placed on or removed from probation, they will be notified in writing by the Class Dean. A copy of the notice will be sent to their parents or guardians.

## Probation and Academic Performance

Academic Probation is determined by a student's low cumulative average (GPA) at the end of the preceding semester. It is not a penalty but a warning and an opportunity for improvement.

The following rules delineate the GPA limits of academic probationary status:
A first-year student having a cumulative average of 1.75 but less than 2.00 at the end of the first year will be on probation for the first semester of the second year.

A second-year student with a cumulative average of 1.85 but less than 2.00 at the end of the first semester will be on probation for the second semester of the second year.

A transfer student with a GPA of 1.75 but less than 2.00 at the end of the first semester at Holy Cross will be on probation for the second semester. Thereafter, transfer students must achieve the cumulative average required of their class year.

A student who fails to maintain a cumulative 2.00 GPA at the end of all semesters after the third will be suspended in the first instance and dismissed in a subsequent instance.

Students who are eligible for suspension or dismissal because of a low cumulative GPA but whose appeal has been granted by the Committee on Academic Standing are automatically placed on probationary status.

Probationary status is removed by the achievement, the next semester, of the cumulative average required for that semester.

As soon as students are placed on or removed from probation, they will be notified in writing by the Registrar. Copies of the notice will be sent to their parents or guardians and advisors.

## Removal of Deficiency

Students are expected to complete four courses with a passing letter grade each semester. Each of these courses must be worth at least one unit of credit. Students who withdraw from a course, fail a course, or enroll in fewer than four courses incur a deficiency.

A deficiency may be removed by Advanced Placement credit, by enrollment in a fifth course for a letter grade, or by the transfer of an approved course taken at another institution. Courses taken on a Pass/No Pass or Audit basis may not be used to remove deficiencies.

Students are expected to satisfy a deficiency in the semester (or summer) immediately following the one in which it is incurred. Students who have more than one deficiency at the beginning of the second or third year or who have any outstanding deficiencies at the end of the third year may lose class standing.

The units attempted in a course in which a student incurs a deficiency will remain on the student's transcript; if the deficiency is a result of course failure, the F will continue to be used in calculating the GPA.

## Academic Suspension and Dismissal

A student will be suspended from the College for any of the following reasons:

1. Two course failures (any combination of F or NP in courses taught at Holy Cross, including the Washington Semester Program, through the Colleges of Worcester Consortium, and in Study Abroad or Study Away Programs) in any single semester;
2. A total of six course failures (any combination of F or NP) on one's Holy Cross transcript;
3. A cumulative GPA of less than 1.75 after the second semester (end of first year), of less than 1.85 after the third semester, and of less than 2.00 after the fourth semester (end of second year) or any subsequent semester. A transfer student will be suspended after the first semester at Holy Cross if the GPA is less than 1.75; thereafter, transfer students are subject to the limits of suspension stipulated for their class year.
4. A second violation of the academic honesty policy by a student who is not currently on probation for violation of the policy.
A first suspension is for one academic year. After the one-year suspension, readmission is automatic if the student is in good financial standing with the College. Students who wish to return to the College should notify the Class Dean well in advance of the semester they wish to return. A second suspension results in academic dismissal, which is ordinarily considered final separation from the College. A stu-
dent will also be dismissed for a second violation of the academic honesty policy while on probation for a first violation or for a third violation overall.

Appeals of suspensions or dismissals for academic reasons may be made to the Committee on Academic Standing. The letter of suspension or dismissal from the Class Dean will provide students and parents with the necessary details of appeal. The Class Deans are available for consultation regarding appeal procedures and will also inform the student of the final Committee decision. Dismissals upheld by the Committee on Academic Standing may be appealed to the President of the College

## Voluntary Withdrawal from the College

Students who withdraw voluntarily from the College are entitled to separation in good standing under the following conditions:

1. They must not be liable to dismissal for disciplinary reasons.
2. They must not be liable to dismissal for academic reasons.
3. They must return all College property.
4. They must settle all financial indebtedness with the College.
5. They must properly notify the Class Dean of their intention to withdraw.

## Readmission to the College

Students who have withdrawn in good standing and who wish to be readmitted to the College must apply to the appropriate Class Dean. Any materials for readmission required by the Class Dean (a letter requesting readmission, letters of recommendation, transcripts of all intervening work, statements of good standing, and other substantiating documents) must be received by the Class Dean by July 20 for fall readmission and by December 1 for spring readmission.

Even when a withdrawal from the College is voluntary, readmission is not automatic.

## Leave of Absence Policy

A student at the College may request permission to be absent from the campus for a period of one or two semesters. In exceptional circumstances (e.g., military service, health) the leave may be granted for a longer period of time. A leave must be renewed prior to its expiration before it can be extended; otherwise the student will be withdrawn from the College when it expires. Students anticipating a Leave of Absence should consult with the Office of Financial Aid regarding the status of loans during the period they are on leave.
A Leave of Absence is granted with the following conditions:

1. The request for a Leave of Absence ordinarily is made during the semester prior to the proposed Leave, and usually begins at the end of a regular semester. A Leave of Absence for health-related reasons may be requested at any time.
2. A student must be in good academic standing at the end of the last semester before the Leave is to begin.
3. A student is required to file in writing with the appropriate Class Dean his or her reason for requesting or renewing a Leave of Absence.
4. A student on Leave of Absence must leave the campus community and ceases to be entitled to campus activities.
5. Students on Leave must notify the Class Dean of their intent to return to campus. If in good financial standing with the College, they will be readmitted automatically.
6. A student will be required to pay a fee of thirty dollars (\$30) for each semester on Leave of Absence.
7. A student may not advance in class standing by taking courses at other institutions while on Leave from the College.

## Academic Exceptions Policy

Students may ask for a postponement of academic responsibilities (incompletes, late withdrawals from one or more courses, or extensions) for personal and health reasons. Students request academic exceptions from the Class Dean. The Class Dean makes a decision about the request, which may include conditions that must be met in order for the student to complete courses or register for courses in a subsequent semester. These conditions are communicated to the student in writing. The Class Dean may consult with family members, health professionals, faculty members or professional staff in appropriate campus offices (e.g., Residence Life, Counseling Center, Health Services) in designating conditions and monitoring the student's compliance.

Academic accommodations are also possible under the provisions of the Americans with Disabilities Act (1990). Students requesting such accommodations are to contact the Office of Disability Services.

## Involuntary Leave of Absence

Students who the College has reason to believe may harm or threaten to harm themselves or others, and who do not seek a Voluntary Leave of Absence, may be asked to leave the College involuntarily. Circumstances leading to an Involuntary Leave of Absence include but are not limited to:

1. Actions that result or might potentially result in injury to the student or others, or serious destruction of property.
2. Statements that threaten the safety of that student or that threaten the safety of others.

Before making a decision to place a student on Involuntary Leave, the Vice President for Student Affairs or a designee will investigate the incident(s), interviewing the student and/or other individuals deemed appropriate (e.g., other students, family members, health professionals).

When the Vice President for Student Affairs decides to place a student on Involuntary Leave of Absence, the reasons for the decision, the length of time for the leave, and the conditions for re-enrollment will be communicated in writing to the student and the student's Class Dean, who will notify the Registrar.

An Involuntary Leave of Absence is effective immediately and the student may be required to leave the campus immediately, even if he or she appeals the action. A student placed on Involuntary Leave of Absence is subject to all provisions of the Leave of Absence Policy of the College.

To satisfy the conditions of an Involuntary Leave of Absence, the student must present evidence to the Vice President for Student Affairs that the problem no longer precludes safe attendance at the College and that he or she is ready to resume studies. If the student is to be re-enrolled, the Vice President for Student Affairs communicates this decision to the Class Dean who notifies the Registrar.

If a campus office has been involved in recommending conditions for re-enrollment, the Vice President for Student Affairs shall consult that office in evaluating the student's request for re-enrollment. The Vice President for Student Affairs may also consult with one or more other professionals regarding the student's request and the evidence presented and may require that the student be interviewed by a professional associated with the College.

## Appeal of Involuntary Leave of Absence

A student placed on an Involuntary Leave of Absence has 10 business days to appeal the decision.
Appeals are directed to the President of the College or a designee and must be in writing and state the reasons for the appeal and the desired resolution. The appeal will be considered within five business days of the request.

The decision of the President of the College is final.

## Directory Information and Release of Information

The items listed below are designated as Directory Information and may be released at the discretion of the institution. Under the provisions of the Family Educational Rights and Privacy Act of 1974, as amended, students have the right to withhold the disclosure of any or all of the categories of Directory Information. Written notification to withhold any or all of Directory Information must be received by
the Registrar by the second Friday in August of the academic year.
Directory information includes: the student's name, address, telephone listing, e-mail address, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees, honors and awards received, and the most recent previous educational agency or institution attended by the student.

A request to withhold any or all of the above data in no way restricts internal use of the material by the College such as the release of academic information to college officials whose positions justify such release of information to them, or to college committees charged with the selection of students for College and National Honor Societies. In compliance with the Family Education Rights and Privacy Act of 1974, as amended, the College reserves the right to disclose information about dependent students to their parents or guardians without the students' written consent.

## Privacy of Student Records

The Family Educational Rights and Privacy Act of 1974, as amended, gives students certain rights, consistent with the privacy of others, to review records, files, and data about them held on an official basis by the College. The Act also gives students and former students a right to challenge the content of those records, files, and data which they believe are inaccurate, misleading, or otherwise in violation of their privacy and other rights.

Individuals may request review of the records maintained about them from the appropriate offices. Any challenges to the content of the records, files, and data that cannot be resolved directly should be made in writing to the Office of the Registrar. Information about students and former students assembled prior to January 1, 1975, under promises of confidentiality, explicit or implicit, will not be made available for review by the concerned students without the written consent of the authors.

Students who believe their rights under the Family Educational Rights and Privacy Act have been violated should file a written complaint with the Family Policy Compliance Office, U.S. Department of Education, 600 Independence Avenue, S.W., Washington, D.C. 20202-4605. Further information about this issue may be obtained by contacting the Office of the Registrar.

## Honor Societies

## National Honor Societies

Alpha Sigma $\mathbf{N u}$ - the honor society of the Jesuit institutions of higher education, is unique among honor societies in that it seeks to identify the most promising students who demonstrate an intelligent appreciation of and commitment to the ideals of Jesuit high education-intellectual, social, moral, and religious. Students who rank in the top 15 percent of their class may be considered for membership. Each chapter can nominate no more than four percent of a particular class. Selection is based on scholarship, loyalty, and service.
Phi Beta Kappa - founded in 1776, Phi Beta Kappa is the oldest and most prestigious national honor society of the liberal arts and sciences. Election to Phi Beta Kappa is recognition of academic achievement and is intended for students who have demonstrated particular breadth in their undergraduate program. Each year, the Holy Cross Chapter of Phi Beta Kappa nominates for membership fourth-year students from the top ten percent of their class who have completed one course in mathematics and have demonstrated language competence equivalent to the second semester of an intermediate-level language course (in addition to their common requirements).
In addition, the Chapter nominates third-years students who have completed at least 20 semester courses and demonstrated an exceptional level of academic achievement.

## Disciplinary Honor Societies

Alpha Kappa Delta - the national honor society in sociology is an affiliate of the American Sociological Association and awards recognition to high scholarship in sociology.
Delta Phi Alpha - the national German honor society, devoted to recognizing excellence in the study of German, to providing an incentive for higher scholarship, to promoting the study of the German language, literature, and civilization and to emphasizing those aspects of German life and culture which are of universal value and which contribute to the search for peace and truth.
Dobro Slovo - the National Slavic Honor Society serves as a means for recognition of academic excellence in the study of Slavic languages, literature and history.
Gamma Kappa Alpha - the Italian honor society, dedicated to promoting and sustaining excellence in the study of Italian language, literature and culture.
Omicron Delta Epsilon - the national society in economics, which selects as members students who have distinguished themselves in the study of economics.
Phi Alpha Theta - the national honor society in history, devoted to the promotion of the study of history by the encouragement of research, good teaching, publication, and the exchange of learning and thought among historians.
Phi Sigma Tau - the national honor society in philosophy, which awards distinction to students having high scholarship and personal interest in philosophy.
Pi Delta Phi - the national French honor society, devoted to recognizing outstanding scholarship in French language and literature, to increasing Americans' knowledge of and appreciation for the cultural contributions of the French-speaking world, and to stimulating and encouraging French cultural activities.
Pi Mu Epsilon - the national honor society in mathematics, which promotes scholarly activity in mathematics by electing members on an honorary basis according to their proficiency in mathematics.
Pi Sigma Alpha - the national honor society in political science, which selects students who have distinguished themselves in the study of the discipline.
Psi Chi - the national honor society in psychology and an affiliate of the American Psychological Association, which seeks to nurture student involvement in psychology.
Sigma Delta Pi - the national honor society in Spanish, which honors those who seek and attain excellence in the study of the Spanish language, literature and culture.
Sigma Phi Omega - the national society seeks to recognize the excellence of those who study gerontology and aging as well as of the professional aging service personnel. The society seeks to promote scholarship, professionalism, friendship, and services to older persons, and to recognize exemplary attainment in gerontology/aging studies and related fields. Membership is open to students who have a concentration in gerontology/aging studies.
Sigma Pi Sigma - the national physics honor society, which seeks to recognize high scholarship in physics.
Sigma Tau Delta - the national English honor society, was established in 1987. Eligible English majors are elected to membership and actively engage in the promotion of English studies.
Theta Alpha Kappa - the national honor society in religious studies and theology embraces three areas of primary concern to students of religion: God, humanity and community. Its aims are to further the study of religion and theology at the graduate and undergraduate level; encourage excellence in research, learning, teaching and publication; and to foster the exchange of ideas among scholars.

## Annual Awards

Fourth-Year Competition

The George J. Allen, Ph.D., '65 Psychology Award is given to a fourth-year psychology major who best exemplifies the integration of empirical scientific research and community service.
The American Institute of Chemists Foundation Award goes to an outstanding fourth-year chemistry major for a demonstrated record of ability, leadership, and professional promise.
The Pedro Arrupe Medal for Outstanding Service is awarded to a graduating man and woman whose faith in the gospel is made visible through their work for justice, both at Holy Cross and beyond.
The Asian Studies Program Award is presented to a fourth-year Asian Studies major or concentrator who has submitted the most outstanding piece of scholarly or artistic work as judged by a committee of Asian Studies faculty. The award also recognizes distinctive academic achievement in the Asian Studies curriculum and contribution to the Asian Studies Program.
The Beethoven Prize is awarded to a fourth-year student for the best historical essay on music or for an original composition.
The Nellie M. Bransfield Award is given to a fourth-year outstanding actor/actress.
The Joseph C. Cahill Prize is awarded to a graduating chemistry major for excellence in chemistry.
The Frank D. Comerford Award is given to a fourth-year student for superior ability in public speaking.
The Philip A. Conniff, S.J., Prize is awarded by the Classics Department to a fourth-year Classics major for excellence in the study of the Latin language.
The Father Flatley Medal is awarded to a fourth-year student who displays the greatest degree of talent for (and love of) Philosophy.
The Rev. John W. Flavin, S.J., Award in Biology is given to a fourth-year biology major who has shown excellence in scientific achievement, humanitarian service, or contribution to the vitality of the Biology Department and the College.
The Dr. Marianthi Georgoudi Memorial Award is given to the outstanding graduating Psychology major as judged by the faculty of the Psychology Department. This award is in memory of Dr. Georgoudi who had been a member of the Holy Cross Psychology Department.
The George H. Hampsch Award is for outstanding contribution to the Cause of Peace. This award is in memory of Dr. Hampsch, who had been a member of the Philosophy Department.
The Rev. William F. Hartigan Medal is awarded for the best essay on a subject of Religion.
The Rev. Robert F. Healey, S.J., Greek Prize is awarded by the Classics Department to a fourth-year Classics major who has attained a high degree of proficiency in the study of Ancient Greek.
The Holy Cross Club of Worcester Prize is awarded for outstanding scholastic achievement by a fourth-year student from the Worcester area.
The Thomas P. Imse Alpha Kappa Award is given to a fourth-year sociology major who is a member of Alpha Kappa Delta. This award is in recognition of scholarly excellence and demonstrated commitment to learning for the service of humankind.
The Robert Edmond Jones Award is awarded by the Theatre Department for achievement in the areas of Design and Technical Theatre.
The Edward V. Killeen, Jr., Prize is awarded for general excellence in chemistry throughout the Premedical course.
The Rev. George A. King, S.J., and Richard J. Keenan '67, Memorial Prize is awarded for proficiency in Political Science.
The Latin American and Latino Studies Award is presented to a fourth-year Latin American and Latino Studies Concentrator who has demonstrated academic excellence in the program as well as in the quality and diversity of program courses. The award also recognizes outstanding participation in events and special programs sponsored by the concentration.

The John C. Lawlor Medal is awarded to the outstanding student and athlete throughout the college course.
The Leonard Award is given for proficiency in oratory, debating or like competition. This award is given to the Valedictorian of the graduating class.
The Heather C. Lochmuller '98 Award was established in 1999 in memory of Heather. It is awarded to a fourth-year chemistry major for outstanding service to the Chemistry Department.
The Gertrude McBrien Mathematics Prize is awarded for proficiency in Mathematics.
The George B. Moran Award goes to a fourth-year student who has given evidence of scholarship and leadership in College activities.
The Nugent Gold Medal is awarded for general excellence in Physics.
The John L. Philip Memorial American Sign Language Award is given to a graduating student who has demonstrated an interest in, and motivation to learn, American Sign Language (ASL) and to bring that learning to life. This student has integrated his/her classroom knowledge of ASL and Deaf culture with respect for, and interaction with, members of the Deaf Community.

The John Paul Reardon Medal and Award was established in 1985 by John Paul Reardon, a former faculty member, in memory of the late Rev. J. Gerard Mears, S.J. The medal and award are given annually to a graduating student for excellence in studio art.
The George Bernard Shaw Award is given for the best essay in dramatic literature or film.
The Study Abroad Independent Project Prize is given for initiative, seriousness of purpose, and excellence in a Study Abroad Independent Project.
The Vanhook-Vidulich Award is given to a fourth-year student for an excellent research thesis and presentation.
The Vannicelli Washington Semester Program Award is given for the best thesis in the Washington Semester Program.
The Varsity Club Norton Prize is given to an outstanding student athlete.
The Edward F. Wall, Jr., Prize is awarded annually to a fourth-year student whose research essay in any field of history is judged by the Department of History to be exemplary. The prize is in memory of Edward F. Wall, Jr., a former Chair of the Department and Class Dean, who was a member of the faculty for 34 years.
The Wall Street Journal Student Achievement Award honors the student who has contributed most significantly in scholarship, enthusiasm and/or service to the Economics Department.

The Rosalie S. Wolf Gerontology Consortium Award is given to a fourth-year Gerontology Studies Concentrator for outstanding scholarly achievement and demonstrated commitment to aging studies.
The Women's Studies Award was established in 1993 in recognition of academic excellence in Women's Studies, the development and articulation of a feminist critical consciousness, and for the ability to integrate and reflect on issues of pressing concern to women.
The Carter G. Woodson Prize is given to a fourth-year student for outstanding scholarly or artistic achievement in African American Studies.

## Third and Fourth-Year Competition

The Undergraduate Award in Analytical Chemistry is given for excellence in analytical chemistry.

## Third-Year Competition

The Thomas A. Fulham Environmental Studies Prize is given to a third-year student in recognition of his or her work in safeguarding our physical environment.
The Markham Memorial Scholarship Award is given to a third-year student majoring in philosophy who demonstrates the highest aptitude for philosophical inquiry and whose commitment to his or her studies best exemplifies the belief that "critical examination of fundamental religious and philosophical questions is integral to a liberal arts education."
The John D. O'Connell Prize for Accounting Excellence was established in '94 to honor the distinguished services of the College's senior accounting professor. Given to a third-year accounting major for academic achievement, service and leadership. The awardee, selected by the accounting faculty, is honored for continuing the traditions associated with Professor O'Connell-pursuit of academic excellence, demonstrated leadership in service to the community and demonstrated interest in and commitment to the profession of public accounting.
The Rev. John F. Redican Medal is given for general excellence to a third-year student who has made a unique contribution to the College's intellectual life.

## Third, Second, and First-Year Competition

The Undergraduate Award for Achievement in Organic Chemistry is for excellence in organic chemistry.

## Second-Year Competition

The Teresa A. Churilla Second-Year Book Award in Biology is given in memory of Teresa A. Churilla, a Biology major, to a second-year student of biology who best exemplifies the ideals of intellectual curiosity, academic excellence, and scientific promise that characterized Teresa.
The Mrs. Kate C. Power Award is given to the highest-ranking student in the second-year class.

## First and Second-Year Competition

The Joseph J. O'Connor Purse is for excellent debating by a first-year or second-year student throughout the debating season.

## First-Year Competition

The Annual CRC Press Freshman Chemistry Achievement Award goes to an outstanding student in the first-year chemistry sequence.
The Ernest A. Golia '34, M.D., Book Award is given to a first-year student who is a non-Classics major for excellence in any course offered by the Department.
The Anthony P. Marfuggi Student Award for academic excellence in the first year of study.

## Competition for All Students

The Academy of American Poets Prize is given for the best poem or group of poems submitted to the English Department.
The Elias Atamian Family Book Award is given to a student who has excelled in Middle Eastern Studies.
The Bourgeois French Prize is awarded for the best essay on a subject relating to the culture and history of the French and their descendants in the United States.
The Crompton Gold Medal is awarded for the best scientific essay or research paper submitted during the school year.
The John J. Crowley Memorial Prize is awarded for the best essay on a religious, literary, historical,
economic or scientific subject.
The Patrick F. Crowley Memorial Award is given for proficiency in oratory and debating.
The John J. Cummings, Jr./Bai Award is for the best essay or research paper submitted during the academic year on a subject relating to financial institutions.
The James Fallon Debating Purse was founded in 1901 by the Rev. John J. Fallon, of the class of 1880, for year-long excellence in debating skills.
The Edna Dwyer Grzebien Prize is awarded for excellence and commitment in the study of modern languages.
The Walter Gordon Howe Award is for excellence in percussion performance.
The Monsignor Kavanagh Medal \& Award are given for the best original essay on some phase of Christian art or archeology.
The William E. Leahy Award is given in memory of William E. Leahy, of the class of 1907, for leadership as a debater.
The Leonard J. McCarthy, S.J., Memorial Prize is awarded for the best essay in the criticism of English or American Literature.
The Purple Prize is awarded for the best poem submitted to The Purple.
The James H. Reilly Memorial Purse is given to the student who has contributed the best poem or short story to The Purple.
The Freeman M. Saltus Prize is awarded for excellence in writing essays on labor or economics.
The Strain Gold Medal is given for the best essay submitted during the academic year on a subject taken from the field of philosophy.
The Maurizio Vannicelli Prize in Italian Studies is awarded for the best essay on a theme of Italian literature or culture.

## National Scholarships and Fellowships

The Committee on Graduate Studies and Fellowships advises students applying for various prestigious awards to support post-graduate study (Beinecke, Fulbright, Goldwater, Javits, Marshall, Mellon, National Science Foundation, Rhodes, Rotary, St. Andrews Society, Truman Scholarship, and Watson, among others). Where appropriate, the Committee recommends College nominees for these awards. Materials concerning these and other awards are available from the Office of the Graduate Studies Advisor.

Students should begin preparing for these competitions early in their undergraduate career. They should seek faculty assistance during the first three years to develop the necessary projects, ideas, credentials, and research initiatives that will serve as the foundations of a finished proposal. The Graduate Studies Advisor is available to meet with interested students and help them use the resources of the Graduate Studies Office to assist in determining the suitability of their ideas for proposals.

Some of the awards are directed to students in specific majors. For example, the Goldwater Scholarship is for second- and third-year students of math and science; they are nominated by the faculty in the departments of biology, chemistry, physics and math. The Truman Fellowship is for those interested in pursuing studies leading to public service. Students apply for this award in the third year and should consult with the Graduate Studies Advisor in their second year. The Beinecke Scholarship, also applied for in the third year, is for students planning graduate study in the arts, humanities, or social sciences. Most fellowships require application in the first semester of fourth year. Students submit a preliminary application to the Committee on Graduate Studies. Members of the Committee review applications and interview applicants in selecting candidates for institutional recommendation. Faculty members are
encouraged to recommend students to the attention of this Committee.

## Special Academic Programs

## The First-Year Program

Each incoming student is invited to join the College's First-Year Program (FYP). Approximately 20 percent of the first-year class participates in the FYP. The FYP is not an honors program. Students are admitted to the FYP solely on the basis of their interest in the program. The program offers yearlong seminars, common readings, and three to four extracurricular events per semester that all FYP faculty and students agree to attend. All FYP students live in the same residence hall for the entire year.

Each FYP course, all the common readings, and the outside events are shaped around a theme anchored in the ultimate question "How then shall we live?" Faculty from a variety of disciplines design and teach the seminar-like FYP courses, each of which enrolls approximately 15 students. In each course, the professor not only addresses the theme through his or her academic discipline, but also leads discussions about the extracurricular events and readings. Each yearlong seminar fulfills one common area requirement. In addition to the seminar, each FYP student enrolls in three non-FYP courses, for a normal load of four courses each semester.

## Study Abroad

Holy Cross has a highly regarded study abroad program, and qualified students wishing to extend their curricular opportunities abroad are encouraged to consider attending a select foreign university during their third year. The College currently sponsors 23 year-long programs throughout the world, including Australia, Cameroon, China, England, France, Spain, Ireland, Italy, Japan, Mexico, Peru, Russia, and Scotland. In addition, Holy Cross students attend approved programs in Austria, Egypt, Germany, Hungary, and Jamaica. These programs provide students with an exciting and fully credited complement to the offerings available on campus, and serve as international extensions of the College's curriculum and facilities.

Holy Cross does not rely on an outside program to place students since such an arrangement often can result in limited curricular opportunities and lack of integration into the life of the foreign university. Instead, Holy Cross administrators enter into direct partnerships with officials of foreign universities. The effect is that Holy Cross students have a strong advising and support system within the foreign university, and are accepted into the host universities at the same level-and must meet the same requirements and take the same exams-as the native students.

Second-year students are eligible to apply for the Study Abroad Program. A student's application is submitted to the Study Abroad Office and reviewed by the Study Abroad Committee. Study abroad ordinarily begins in the fall semester of the third year and lasts for a full academic year. Participation in the program normally is limited to students with at least a B average ( 3.00 GPA ) or to students with equivalent qualifications. If students intend to study in a country whose language is other than English, they must have achieved intermediate level competency in that language before going abroad. Entering students considering study abroad, therefore, should pursue foreign language study in their first year and continue in their second. Students should expect to be questioned in that language and to demonstrate a reasonable competence in understanding and speaking it at their interview by the Study Abroad Committee. A background of courses that includes the selected country's history, literature, fine arts, and philosophy will be viewed favorably in evaluating a student's candidacy for study abroad.

Students accepted into the Study Abroad Program participate in an orientation program in the host country and, in most cases, live with a local family for the entire year. Students also complete an independent study project during their time abroad. Often involving fieldwork, these projects provide students an opportunity to interact closely with the people and political, economic and cultural institutions of their host country.

## Concurrent Registration in the Colleges of

## Worcester Consortium

Admission to Holy Cross means access to the 15 institutions of the Colleges of Worcester Consortium. Participating institutions are: Anna Maria College, Assumption College, Atlantic Union College, Becker College, Clark University, College of the Holy Cross, Fitchburg State College, Quinsigamond Community College, Mt. Wachusett Community College, Tufts University School of Veterinary Medicine, Massachusetts College of Pharmacy, Nichols College, University of Massachusetts Worcester, WPI, and Worcester State College. Through cross-registration, joint faculty appointments and curriculum projects, and other efforts, the Consortium explores ways of broadening academic programs for faculties and students as well as expanding continuing education opportunities and community service activities. In addition to these institutions, a group of associate organizations participates with the Consortium in providing further enrichment to college curricula. These include the American Antiquarian Society, the Worcester Center for Crafts, International Center, Ecotarium, Old Sturbridge Village, Worcester Art Museum, Worcester Historical Museum, the Worcester County Horticultural Society, Dynamy, John Woodman Higgins Armory Museum, Music Worcester, WICN Public Radio, and Worcester County Mechanics Association.

Normally, a Holy Cross student may enroll in one course per semester at a Consortium institution provided the course has been approved by the appropriate Department Chair, the Dean of the College, and the Registrar. In special circumstances, a student may be permitted to enroll in two Consortium courses in one semester provided that approval has been granted by the Dean of the College. Application for this approval is through the Office of the Assistant Dean.

Evening and summer courses at institutions belonging to the Colleges of Worcester Consortium are not part of the concurrent registration program and will be accepted in transfer only if they satisfy degree or college-sponsored program requirements (see Transfer Courses).

A course taken at a Consortium institution must grant a minimum of three semester credits in order to be counted as one of the 32 semester courses required for graduation. Grades from courses taken through the Consortium are calculated into a student's GPA.

The College reserves the right to withhold permission to attend a Consortium institution if the calendar of the institution differs substantially from the calendar of Holy Cross, thus making it impossible for a student to complete graduation and/or course requirements by the date stipulated by the College.

## The Venture Consortium

The Venture Consortium is a collaboration of nine colleges and universities organized to provide alternative work and study opportunities that complement liberal arts education, emphasize social responsibility and involvement, and forge links between higher education and the community at large. Member institutions include Bates College, Brown University, Holy Cross, Franklin and Marshall, Sarah Lawrence College, Swarthmore College, Syracuse University, Vassar College, and Wesleyan University. The programs described below are available through the Venture Consortium.
The College Venture Program: For students who wish to take a Leave of Absence from the College, the Venture Program offers a wide variety of temporary, full-time job opportunities in locations throughout the United States. Positions are available in the media, environmental agencies, social services, investment corporations, parks and recreation, public relations, social and medical research, preschool and elementary education and other fields. Most positions offer stipends and or housing in addition to the opportunity to explore career areas. Information about the College Venture Program is available in the Career Planning Center and on the Venture Consortium Web site at: www.brown.edu/Administration/Venture/CV.html.
Urban Education Semester: A full semester of academic credit is awarded students accepted into Venture's Urban Education Semester. This program involves the interdisciplinary and experimental study of inner-city education through the Bank Street College of Education in New York City. Students enrolled in the program combine fieldwork in New York's public schools with coursework at the Bank Street College. Students are eligible to participate in this program during the spring semester of the second year, in either
semester of their third year, or the first semester of the fourth year. Information about the Urban Education Semester is available in the Center for Interdisciplinary and Special Studies.

## For Students Interested in the Health Professions

The Premedical and Predental Program at Holy Cross has maintained an excellent record in preparing students for entrance to professional schools. A premedical or predental student may declare a major in any discipline and fulfill all the requirements for medical or dental school admission at the same time. A student should select a major which corresponds to his or her qualifications and interests and not assume that a science major is expected of premedical students. Students admitted to the Premedical and Predental Program are guaranteed admission to courses that fulfill the science and mathematics requirements, which are listed below. Many science majors will find that these requirements are fulfilled as they complete their major course requirements.

Chemistry - 4 semesters
Biology - 2 semesters
Mathematics - 2 semesters
Physics - 2 semesters
English - 2 semesters
All premedical and predental students must have completed successfully a secondary school course in chemistry. Admission to the program is very selective because of the large numbers of students who are interested. The College has a Premedical and Predental Advisor to assist all students planning careers in the health sciences.

## For Students Interested in Law

Over 1,000 students from Holy Cross have matriculated to ABA-accredited law schools in the past decade. Students thinking about a career in law are encouraged to choose a major at the College that suits their talents and interests. Lawyers come from a wide range of backgrounds. In choosing courses, students are encouraged to include those that develop the following skills: oral and written expression, reading comprehension, and creative and critical thinking. Courses that require students to observe accurately and think objectively are also invaluable.

Holy Cross is a member of the American Mock Trial Association and the American Moot Court Association. Our Mock Trial teams have won bids to national tournaments in five of the past six years. The 2003 team placed 1st at the New England Regional Championship, winning the Justice Cup, beating 27 teams from some of the best schools in the country. The 2004 team finished 2nd, 3rd and 4th in the NYC Regional, earning 2 bids to National Tournaments. The 1999 team received an "Outstanding New School" award at the National Championship Tournament in Iowa. In 2001 and 2002, College teams finished 6th and 3rd out of 50 at the National Tournament, and also won the Spirit of AMTA award, presented to the team that best exemplified the ideals of civility and fair play. The competitions are intense. Students must develop legal strategies in a team environment, working with a case that annually rotates between civil and criminal. Students work to improve their advocacy and overall presentation skills. While obviously useful for future lawyers, the set of skills developed in Mock Trial are also useful in other fields and professions.

The College also fields a Moot Court team. At the 2004 National Championship Tournament in Texas, Holy Cross finished 2nd and 5th out of 68 teams in the competition. Moot Court deals with appellate cases usually involving clashes of constitutional safeguards. Two Holy Cross alumni serve as coaches to both teams.

Holy Cross prelaw students solicit, edit and sometimes write articles for the Holy Cross Journal of Law and Public Policy. Published every year in January and currently in its eighth edition, the Journal has over 50 law schools as paid subscribers, in addition to many alumni lawyers and libraries. Our students work with law school student authors by editing and condensing articles selected for publication, as well as performing cite checks using LEXIS. The Journal staff also does all journal layout work using

## For Students Interested in Military Science

Holy Cross offers a program in Naval Science. Students interested in this program should consult the appropriate section of this Catalog. Holy Cross students who are enrolled in Army ROTC Military Science Program or Airforce ROTC Military Science Program do so through the Colleges of Worcester Consortium. Courses for these programs are offered through WPI and appear on a student's transcript although they do not count toward the thirty-two courses required for graduation.

For additional information, visit the website for:
Airforce ROTC (http://www/wpi.edu/Academics/Depts/AFAS)
or Army ROTC (http://www/wpi.edu/Academics/Depts/MilSci).

## For Students Interested in Teacher Education

Holy Cross has a program leading to Massachusetts state licensure as a secondary or middle school teacher in the subject areas of biology, chemistry, English, French, history, Latin, mathematics, physics, Spanish and visual arts when completing a liberal arts degree with a major in the same academic area. A program for the teaching of religion at the secondary level is available for religious studies majors, although this program does not lead to Massachusetts state licensure.

The program requires three or four courses in education prior to a semester in the fourth year which is devoted to a practicum or student teaching. These courses are Educational Psychology, Philosophy of Education and Methods of Teaching (Science, Mathematics, English, Languages and History), and the Middle School (for students preparing to teach at that level). There are also two pre-practicum experiences of 40 hours each prior to the fourth-year practicum. Both pre-practica and the practicum occur on site in Worcester-area schools. The practicum experience counts as three courses and an accompanying seminar counts as one course in the practicum semester. Students should contact the Director of the Teacher Education Program for further information.

## For Students Interested in Graduate Study

Recently more than half the graduating students have begun some form of graduate or professional study within a year or two after graduation. For some it is in one of the specialized fields described elsewhere in this section. Others decide to continue their studies in academic graduate programs leading to the Master's or Ph.D. degree. Such degrees qualify the student to pursue careers in academia, scientific research, public policy, and many other fascinating areas. The Graduate Studies Advisor consults with students seeking advanced academic degrees. He or she coordinates faculty volunteers who serve as Graduate Studies Advisors in each of the academic departments; maintains a web page and a library of information about graduate and professional studies; informs students about the Graduate Record Examination; promotes opportunities to learn about and practice proposal-writing and interviewing skills; and informs students about special fellowship and scholarship competitions, coordinating procedures to nominate students and facilitating the process of application. With this help Holy Cross students have won Rhodes and Marshall scholarships, Watson fellowships, Fulbright grants and many other awards that have made it possible for them to pursue their personal and professional goals.

## For Students Interested in Business and Management

Experience has shown that a sound, rigorous liberal arts program is an excellent preparation for a business career. The student may major in virtually any field. Discussion with employers recruiting on
campus indicates that it is strongly advisable that a liberal arts student have, in addition to the major, one year of economics, a course in accounting, one year of calculus, and an introductory computing course. The student should have developed an in-depth ability to use the English language in its written and spoken forms and taken an active role in campus activities. Many of the premier graduate schools of business require applicants to have several years of work experience prior to pursuing an advanced degree. The College has a Prebusiness Advisor to assist students with the development of an academic plan, to support preparation for a summer internship and to coordinate special programming for students with an interest in business.

## The 3-2 Program in Engineering

Holy Cross offers cooperative, five-year programs for students who are interested in combining the liberal arts and sciences with engineering. Students enrolled in these programs spend three years as full-time students at Holy Cross and two years as full-time students at the Fu Foundation School of Engineering and Applied Science at Columbia University in New York City or at the Thayer School of Engineering at Dartmouth College in Hanover, New Hampshire. In addition, students can enroll in a similar six-year program at Columbia's Fu School. This program combines four years at Holy Cross with two years at Columbia leading to bachelor degrees from each school.

At the conclusion of this program, students receive both a Bachelor of Arts degree from Holy Cross and a Bachelor of Science degree in engineering from the appropriate institution. Students interested in this program are advised to major in mathematics or a physical science at Holy Cross since they must complete at least one year of physics, one year of chemistry, and two years of mathematics before transferring to the engineering program. They must also demonstrate proficiency in one computer language in order to prepare for the engineering courses.

Any student who fulfills these requirements with a B average has historically been granted admission to Columbia University and Dartmouth. The student pays tuition to Holy Cross for the first three years of enrollment and to the second institution for the last two years. Students are eligible for financial aid in accordance with the financial aid policy of the institution at which the student is currently paying tuition. Columbia University has a financial aid policy similar to Holy Cross, but Dartmouth does not offer financial aid to students during their first year at Dartmouth.

Students who wish to enter this program are not required to apply until the beginning of their third year. However, interested students are urged to consult with the 3-2 Advisor as early as possible in their college career in order to properly plan their courses. Further information is available from the 3-2 Program Advisor.

# The Center for Interdisciplinary and Special Studies 

Richard E. Matlak, Ph.D., Director
Gary P. DeAngelis, Ph.D., Associate Director for Special Programs
Susan Cunningham, Ph.D., Associate Director for Concentrations
Nancy E. Andrews, Ph.D., Director, College Honors Program
Michael R. West, Ph.D., Director, Africana Studies
Thomas Gottschang, Ph.D., Director, Asian Studies
Theresa McBride, Ph.D., Director, Environmental Studies
Isabel Alvarez Borland, Ph.D., Director, Latin American and Latino Studies
Maria Rodrigues, Ph.D., Director, Peace and Conflict Studies
Danuta Bukatko, Ph.D., Director, Women's and Gender Studies
Edward Thompson, Ph.D., Director, Gerontology Program
Steve Vineberg, Ph.D., Advisor, Film-Making
Noel Cary, Ph.D., Advisor, German Studies
Susan Amatangelo, Ph.D., Advisor, Italian Studies
Sarah Stanbury, Ph.D., Advisor, Medieval-Renaissance Studies
Ibrahim Kalin, Ph.D., Advisor, Middle Eastern Studies
Judith Chubb, Ph.D., Advisor, Russian and Eastern European Studies
Judy Freedman Fask, M.Ed., Director, American Sign Language and Deaf Studies
William Meinhofer, Ph.D., Director, Donelan Office of Community-Based Learning
Founded in 1971, the Center for Interdisciplinary and Special Studies (CISS) promotes interdisciplinary and multidisciplinary teaching at the College. It seeks to be a catalyst for innovation and experimentation in the curriculum through a series of academic programs and grant opportunities. The Center's programs fall into three categories: 1) multidisciplinary academic curricular programs, such as studentdesigned multidisciplinary majors and minors, and multidisciplinary concentrations, all of which enable students to address important issues with the methods and perspectives of multiple disciplines; 2) off-campus educational opportunities in Washington, D.C., and the Worcester area, which link learning and living, combining rigorous academic course work with community-based internship and service opportunities; and 3) student-designed programs, such as the Fenwick Scholar Program and Honors Theses for the College Honors Program, which provide students with independent research opportunities. CISS also has the mission to bring to the College curriculum innovative courses and courses in support of its programs that are not offered by the disciplinary departments. Many are one-time offerings.

## Regular CISS course offerings include:

CISS 100 - Digital Video / Creating Film
Alternate years
Covers the history of digital video, concepts of editing, and all aspects of independent production from conception to distribution. Students are given the training needed for using the digital video camera, lighting and sound equipment, and non-linear editing systems to create their final projects. One unit.

CISS 194 - Introduction to Community Organizing
Alternate years
Students study the nature and origins of the Community Building Movement. They receive an overview of Community Building Approaches and learn neighborhood observation and assessment. They also assist the South Worcester Neighborhood Association in planning for the rebuilding of its neighborhoods. One unit.

CISS 200 - Worcester and Its People
Annually
Through its engagement with the specific environment of Worcester, the course addresses the role of
the past and present to the future of the city. It considers Ethnicity and Race, Religion, Culture, Work, Technology, the Built Environment, the Natural Environment, and Politics, all in association with the varied racial and ethnic neighborhoods of the city. One unit.

## CISS 247 - Introduction to Geographic Information Systems

Annually
This course introduces and explores the fundamental concepts of Geographic Information Systems (GIS). GIS technology combines computerized mapping and database management to implement maps on the computer. GIS is used in a diversity of fields ranging from archaeology to zoology, some specific examples being anthropology, epidemiology, facilities management, forestry, geology, and business. This course explains the structure and function of GISs, placing them in the context of computer information systems, cartography, and supporting disciplines such as remote sensing, and shows why and how GIS is important. It covers basic concepts such as map characteristics and projections, spatial data models, relational databases, and spatial analysis. It explores sources of data, data quality, metadata. Implementation and management of GIS projects, choosing a GIS, and the application of GIS are presented. Examples and data sets are taken from the fields of ecology and environment biology. One unit.
CISS 271 - The Arabic Novel
Every third year
The primary aim of the course is to provide a survey of the modern and contemporary Arabic novel as literature but also as a reflector of the cultural, religious, and political issues deeply affecting present-day Arab society in its confrontation with and adaptation to modernity. One unit.
CISS 284 - VITA Practicum Spring
Students have four weeks of exposure to IRS (Volunteer Individual Tax Assistance) VITA training materials, after which they take the VITA exam. Students then go out into the Worcester community for eight hours each to offer tax form assistance to the elderly, low and moderate income, non-English speaking and disabled taxpayers. One unit.
CISS 400 - Tutorial
Fall, spring
For students who may not be associated with CISS programs, but who choose to do independent interdisciplinary study that might not be permitted under their major department's tutorial option. One unit.

CISS 490 - American Studies
Annually
Selected students take a seminar at the world-renowned American Antiquarian Society taught by visiting scholars. Seminar topics vary with the fields of the scholars. One unit.

CISS 496 - Special Project
Fall, spring
For third and fourth year students who wish to do independent work that falls outside of regular course offerings. One unit.
CISS 497 - Interdisciplinary Research
Fall, spring
For students in a CISS program who wish or are required to do an independent interdisciplinary project for their curriculum. One unit.

## Concentrations

Concentrations are the established multidisciplinary minors. They provide students with an opportunity to organize some of their electives around a coherent plan of study related to areas of social and academic significance. Concentrations in Africana Studies, Asian Studies, Environmental Studies, Latin American and Latino Studies, Peace and Conflict Studies, and Women's and Gender Studies enable students to take six or seven courses offered through CISS and a range of departments. Co-curricular events and programming make up an important part of the concentration experience. Students are expected to apply to be concentrators before the end of their third year. Concentration-related courses are also available through the Worcester Consortium.

## Africana Studies

The Africana Studies Concentration offers students an academic and experiential program in African

American, Caribbean, and African topics. The experience of African-Americans in the United States provides a point of departure in the required introductory course. Emphasis is also placed on the rich history and cultures of the peoples of Africa and the African Diaspora, including study of literature, music, and the arts. The concentration's electives give students an opportunity to explore the complex nature of U.S. race relations, racial identity, and the political movements of African and African-American peoples. The concentration serves as a forum for all Holy Cross students, regardless of race, to study together their diverse heritages and common concerns as Americans. Among the courses that contribute to the Africana Studies Concentration are the following:

| AFST110 | Introduction to Africana Studies |
| :--- | :--- |
| ANTH 260 | Constructing Race |
| ANTH 270 | Youth Culture \& Consumption in Comparative Perspective |
| EDUC 240 | Multicultural Education |
| ENGL 368 | African American Literature |
| ENGL 372 | Contemporary African-American Literature and Culture |
| HIST219, 220 | African American History I, II |
| HIST223 | Radicalism in America |
| MUSC 150 | American Music |
| MUSC 218, 219 | Jazz Improvisation I, II |
| POLS 205 | Race and Politics |
| POLS 261 | Contemporary African Politics |
| POLS 263 | Black Political and Social Thought |
| POLS 270 | Africa and the World |
| PSYC 341 | Seminar: Racial/ Ethnic Group Contact |
| RELS 207 | Introduction to Islam |
| SOCL 203 | Race and Ethnic Relations |
| SOCL 243 | African American Social and Religious Thought |
| STWL 235 | Introduction to Post-Colonial Theory |
| STWL 267 | Post-Colonial Writing: African and the Caribbean Experience |

For details on the above courses, please see the respective departmental listings.

## Asian Studies

Asia is the home of major philosophical, religious, and artistic traditions that have shaped the values of half the world's population. As we enter the $21^{\text {st }}$ Century, the economies of Asian nations and political events in Asia increasingly affect the entire world. The Asian Studies Concentration affords students varied opportunities to explore the diverse history, cultures, and contemporary societies of Asia. Students can choose from over 50 courses spanning at least eight different disciplines (anthropology, Chinese, economics, history, music, religious studies, visual and studio arts, theatre) and three sub-regions (East Asia, South Asia, Southeast Asia) to pursue either a multidisciplinary major or a concentration in Asian Studies. They can gain further exposure to Asia through study abroad programs in China, Japan, Indonesia, and Sri Lanka, and through a large number of co-curricular events sponsored throughout the year. Among the courses that contribute to the Asian Studies Concentration are the following:

ANTH 274
ANTH 275
CHIN 101, 102
CHIN 201, 202
CHIN 255
CHIN 301, 302
CHIN 362
CHIN 401, 02

Art \& Power in Asia
Cultures of Southeast Asia
Elementary Chinese 1,2
Intermediate Chinese 1,2
Chinese Culture through the Camera's Eye
Third Year Chinese 1, 2
Topics
Fourth Year Chinese 1, 2

CHIN 409, 410
CHIN 490, 491
ECON 221
HIST 103
HIST 104
HIST 107
HIST 108
HIST 281
HIST 282
HIST 285
HIST 286
HIST 287
HIST 288
HIST 289
HIST 290
HIST 291
MUSC 153, 253
POLS 218
POLS 324
RELS 120
RELS 204
RELS 206
RELS 207
RELS 214
RELS 216
RELS 260
RELS 305
RELS 311
RELS 312
THEA 131, 232
THEA 232
THEA 333, 334

Intro to Literary Chinese 1, 2
Advanced Topics
Economic Development Modern China
Perspectives on Asia: "Traditional" East Asia
Perspectives on Asia 2: Modern Transformations
Origins of Japanese Culture
Asia in Western Fiction Film
Chinese Politics From Confucius to Mao
Revolutionary China
Japan Under the Shoguns
Modern Japan
Japan Since World War 2
The Pacific War
The Warrior Tradition in Japan
Vietnam, More than an American War
Tarnished Gold: Asian Experiences in America
Music of Bali-Gamelan 1, 2
Revolutionary China
East Asian Development
Comparative Religions/World View
Hinduism
Buddhism
Introduction to Islam
Seminar: The Modernization of Asian Religions
Readings in Asian Religious Texts
Comparative Mysticism
Malay and Buddhism
Seminar: Zen Buddhism
Theravada Buddhism
Balinese Dance 1, 2
Advanced Balinese Dance
Balinese Dance 3, 4
For details on the above courses, please see the respective departmental listings.

## Environmental Studies

The concentration in Environmental Studies allows students to construct a program of study that bridges three or more disciplines and that provides a comprehensive understanding of environmental issues. Students are expected to study the causes, mechanisms, and effects of environmental problems by investigating the interplay between natural processes and human civilizations. The concentration requires seven courses, including an introductory course, two to three additional courses in the natural sciences and mathematics and three to four in the social sciences and humanities, including at least one from each. The seven courses must include a minimum of two intermediate/advanced courses, with at least one outside the major. Students are encouraged to consider fulfilling some of their requirements during a semester away, especially through the School for Field Studies, which offers different international locations in Costa Rica, Kenya, Mexico, and the Turks and Caicos Islands. Among the courses that contribute to the Environmental Studies Concentration are the following:

BIOL 114
BIOL 114
BIOL 233
BIOL 250
BIOL 280
Topics in Biology/Environmental Biology
Topics in Biology/Global Environmental Change
Freshwater Ecology
Field Botany
General Ecology

BIOL 361
BIOL 331
CHEM 141
CHEM 144
CHEM 231
CHEM 266
CHEM 268
CHEM 313
CHEM 399
ECON 224
ENGL 375
HIST 200
MATH 110
PHIL 205
PHIL 247
PHIL 247
PHYS 102
POLS 285
POLS 286
RELS 255
RELS 353

Toxicology
Ecosystem Ecology
Environmental Chemistry
Chemistry and Society (when environmental theme)
Introduction to Equilibrium \& Reactivity
Instrumental Chemistry/Analytical Methods I
Analytical Methods 2
Atmospheric Chemistry
Environmental Forensics
Environmental Economics
Nature/Poetry
Environmental History
Topics in Mathematics/Environmental Mathematics
Ethics and the Natural World
Topics: Environmental Ethics
Topics: Philosophy of Nature
Introduction to Meteorology
Global Environmental Politics
Comparative Environmental Policy
Ecology and Religion
Theology and Ecology

For details on the above courses, please see the respective departmental listings.

## Latin American and Latino Studies

The aim of the program in the Latin American and Latino Studies Concentration is to introduce students of all backgrounds to the reality of Latin America's multiplicity of peoples and cultures as they are situated in historical, hemispheric, and global contexts. This focus includes a study of how Latin America has become integrated into the very history and society of the United States. Students select from an array of courses in various disciplines that focus on Latin America in exploring the diversity of the region as well as its common cultural and historical roots. The courses explore the events and processes that have shaped the region and the lives of its people. Students may also study U.S.- based Latino and immigrant Latin American populations through the curriculum and extra-curricular activities. The courses and other program activities consider the increasing transnational practices and identities of Latinos and people of Hispanic-American descent in the U.S., as well as their growing concern over U.S. policies towards other nations in the hemisphere. Courses are available in Anthropology, History, Modern Languages and Literatures, Music, Political Science, Religious Studies and Sociology. Among the courses that contribute to the Latin American and Latino Studies Concentration are the following:

ANTH 265
ANTH 266
ANTH 380
ECON 305
HIST 105
HIST 106
HIST 224
HIST 225
HIST 229
LALS 101
MUSC 255
POLS 251
POLS 257
POLS 326

Cities \& Citizens in Latin America
Violence, Culture and Law
Culture \& Politics of Coca \& Cocaine
Economic Growth and Development
History of Latin America: Colonial Period
History of Latin America: National Period
Latino History, North and South
Central American and Hispanic Caribbean
Mexico since Independence
Perspectives on Latin America
Music of Latin America
Latin American Politics
Politics of Development
Citizenship in Contemporary Latin America

RELS 275
RELS 376
SOCL 285
SPAN 301
SPAN 312, 313
SPAN 315
SPAN 405
SPAN 407
SPAN 408
SPAN 409
SPAN 410
SPAN 411
SPAN 420

Latin American Theology of Liberation
North American Theologies of Liberation
Latinos in the United States
Spanish Composition and Conversation
Surveys of Spanish American Literature
Advanced Spanish Composition and Conversation
Modern Spanish American Narrative
Modern Spanish and Spanish American Poetry
Gabriel García Márquez
Colonial Spanish American Literature
Literature of Exile, Immigration, and Ethnicity
Latin American Literature of 19th Century
Latin American Film

For details on the above courses, please see the respective departmental listings.

## Peace and Conflict Studies

The Concentration in Peace and Conflict Studies is a multidisciplinary program for students who wish to complement their major field of study with courses focused on peace and social justice. The courses offered in the concentration help students address crucial challenges of the contemporary world. Concentrators are expected to take six courses, including an introductory course, elective courses, and an optional capstone project. The choice of electives and projects arises from the student's interests and major. The purpose of the Peace and Conflict Studies Concentration is to educate women and men for the responsibility of citizenship in an age of nuclear weapons, regional, ethnic, and religious conflicts, environmental deterioration, and global economic interdependence. It seeks to give students the intellectual grounding and analytical skills to deal effectively with threats to peace, justice, and human survival. Among the courses that contribute to the Peace and Conflict Studies Concentration are the following:

ECON 316
HIST 101
HIST 101
HIST 101
HIST 223
HIST 255
HIST 262
HIST 269
HIST 282
HIST 290
HIST 293
HIST 301
PHIL 274
PCON 130
POLS 103
POLS 218
POLS 257
POLS 274
POLS 320
POLS 332
POLS 333
RELS 143
RELS 151
RELS 275
SOCL 217

Economics of Peace, Conflict \& Defense
American Themes: Struggles for Justice
American Themes: WW II on the Home Front
American Themes: War \& Conscience
Radicalism in America
Europe of the Dictators
Germany from Dictatorship to Democracy
Italy \& France: War and Resist
Revolutionary China
Vietnam: More than an American War
War \& Cinema
Seminar: Italy \& France, War \& Resistance
Philosophical Anthropology
Introduction to Peace \& Conflict Studies
Introduction to International Relations
Revolutionary China
Politics of Development
Nationalism
Seminar on Political Violence
Seminar: Imperialism
Ethics \& International Relations
Social Ethics
Faith \& World Poverty
Latin American Theology of Liberation
Criminology

SOCL 259
SOCL 265
STWL 235

Children \& Violence
Sociology of Work \& Labor
Introduction to Postcolonial Discourses

For details on the above courses, please see the respective departmental listings.

## Women's and Gender Studies

The Women's and Gender Studies Concentration offers students an opportunity for the multidisciplinary study of women's and men's experiences as they are reflected in the scholarship of the humanities, social sciences, and the sciences. Courses in the concentration teach students how the evolving field of Women's and Gender Studies is transforming thought about women, men, and society. The concentration entails a required introductory course, in which students are introduced to the multiple voices of feminism and the diverse experiences of women in the U.S. and cross-culturally. In addition, students choose four elective courses and complete the concentration with an internship, capstone seminar, or a thesis that integrates what they have learned in the field of Women's and Gender Studies. Each year the program sponsors a range of events including speakers, workshops, and films that complement and extend the work of concentrators and focus the attention of the wider community on issues of gender. Among the courses that contribute to the Women's and Gender Studies Concentration are the following:

ANTH 255 Gender in Cross-Cultural Perspectives
ANTH 256
ANTH 269
ANTH 270
ENGL 345
ENGL 346
ENGL 367
ENGL 382
ENGL 383
ENGL 401
HIST 217
HIST 218
HIST 301
PHIL 277
POLS 315
PSYC 342
RELS 221
RELS 232
RELS 261
RELS 294
RELS 399
SOCL 259
SOCL 265
SOCL 271
SOCL 275
SOCL 276
SOCL 375
SPAN 466
WMST120

The Imagined Body<br>Fashion and Consumption<br>Youth, Culture \& Consumption in Comparative Perspective<br>British Women Writers 1770-1860<br>19th C. Bildungsroman<br>American Women Writers of Color<br>Queer Theory<br>Feminist Literary Theory<br>Seminar: Child, Stowe, Alcott<br>Family in American History I<br>Family in American History II<br>Seminar: Medieval Women and Family<br>Philosophical Perspectives on Women<br>Contemporary Feminist Political Theory<br>Seminar: Gender-Role Development<br>Women in Early Christianity<br>Women and the Bible<br>Feminist Perspectives in Theology<br>Sexual Justice: Social Ethics<br>Theology of Homosexuality<br>Children and Violence<br>Sociology of Work \& Labor<br>The Family<br>The Sociology of Men<br>Women \& Society<br>Men and Violence<br>19th \& 20th C. Women Writers of Spain<br>Introduction to Women's Studies

For details on the above courses, please see the respective departmental listings.

## Special Programs

CISS Special Programs include College Honors, the Deaf Studies Certificate Program, the Gerontol-
ogy Studies Program, the Washington Semester Program, the Academic Internship Program, and the Donelan Community-Based Learning Program.

## The College Honors Program

The College Honors Program is one of the oldest programs providing special educational opportunities at Holy Cross. These special opportunities include seminars designed for the Honors Program, ambitious independent projects culminating in the senior honors thesis, and the intellectual excitement of a multidisciplinary classroom, where students from a wide variety of majors address significant matters with faculty members expert in integrative teaching and scholarship. Students enter the Honors Program as second-semester sophomores, after a rigorous selection process. A common course for sophomores consisting of plenary and seminar sessions is co-taught by faculty in the natural sciences, social sciences, and humanities and arts. Presently, the annual topic of the sophomore course is Human Nature. Students take a second seminar in their junior year, although students who study abroad as juniors can complete this second seminar requirement upon returning. In the senior year, all honors students register for thesis credit equivalent to one course each semester. The senior thesis is an advanced independent project, which can be either in or out of a student's major and which in its ambition and scope represents the finest work of some of the best students of the College. The senior year culminates with the honors class presenting its research publicly to the College community at the Academic Conference.

HNRS 299 - On Human Nature
Spring
Required seminar for sophomore honors students. Three faculty members representing the natural sciences, social sciences, and humanities together engage the newly-selected honors students from majors across the curriculum in a multidisciplinary approach to the metaphysical, cultural, spiritual, and material questions that make difficult a position of certainty about human nature. More generally, this course hopes to model integrative thinking and study. In spring 2005, the course focused on Human Nature and the intersection between art, mathematics, and literature. Co-taught by faculty from mathematics, English, and the Visual Arts, the course analyzed the quest for perfection in the human form, in works of art, the built environment, and the natural landscape. One unit.
HNRS 295, 296 - Third and Fourth Year Honors Colloquium Fall, spring Informal evening gatherings on select topics. Pass/Fail
HNRS 395 - Honors Seminars
HNRS 494, 495 - Honors Thesis
Fall, spring
Honors Seniors take one unit's worth of thesis credit each semester, which is graded at the end of the second semester by the student's advisor, with input from readers. The thesis is a substantial independent project either in or out of a student's major, which means that it may count for major credit or not. Two units.

## American Sign Language and the Deaf Studies Certificate Program

In 1994, through the support of a grant from the 3M Foundation's VISION Program, the College introduced an American Sign Language and Deaf Studies curriculum. The program offers students four semesters of American Sign Language instruction, a course on Deaf Culture, and a seminar class with a concurrent community-based internship experience in an ASL communication environment. The program also offers students numerous co-curricular events including speakers, workshops, and films that complement and extend the language and culture of the Deaf community. In addition to this, students have many opportunities to be actively involved in community-based volunteer programs which provide personal and direct interaction with members of the Deaf community. Students who complete the required courses in the Deaf Studies Program are awarded a certificate of completion. Some students have also designed majors and minors in Deaf Studies and have attended Semester Away at Gallaudet University to experience an immersion experience in Deaf Culture. Courses in the Deaf Studies Program are described under Modern Languages and Literatures.

## The Gerontology Studies Program

The Gerontology Studies Program is a cooperative arrangement among Worcester Consortium colleges and universities for students interested in the study of aging. The main elements of the program are courses, internships, research opportunities and career planning. Successful completion of the program entitles the student to a Colleges of Worcester Consortium (COWC) Gerontology Certificate. The program addresses the aging process, the experience of older people, and the delivery of services to the elderly. Students may elect a wide range of courses drawing on the strengths of the Holy Cross faculty and the Worcester Consortium in order to prepare for graduate study or for work in aging-related professions. CISS courses include:
GERO 379 - Aging Studies Internship
Spring
This seminar will provide an opportunity for student interns in elder care to reflect on and discuss their internship experience. Students will explore family and community concerns in elder care including, but not limited to, autonomy, informed consent, care for elders with dementia, legal issues and options, society's responses, etc. Classes will involve didactic presentation, discussion of assigned readings, and discussions of situations drawn from the internship experiences of each class member and the professional experiences of the instructor, who is a social worker and certified care manager. One unit.

## GERO 390 - Aging and Social Policy

Fall
This course analyzes federal, state, and even local aging policies, and reviews economics of aging on a macro level. Topics include the Older Americans Act, the relationship between aging policy and service provision, policy analysis (including the concepts of entitlements and intergenerational issues), lobbying, advocacy, allocation, health care financing (e.g. Medicare, Medicaid, insurance, HMOs/managed care), financial support (e.g. Social Security and private pensions), and costs of long-term care versus community based care. Also, implications for caregivers, both formal and informal, are discussed. One unit.

Departmental courses include Medical Sociology (SOCL 263), Aging and Health Care (SOCL 390), Psychopathology and Aging (PSYC 360), Sociology of Mental Health (SOCL 291). Courses offered at Consortium schools include: Death, Dying and Society (Assumption College), Loss and Bereavement (Assumption), Sociology of Medicine (Clark University), and Policy Planning for an Aging Society (Worcester State).

## Linking Learning and Living

## Washington Semester Program

Through the Washington Semester Program, a third-year student or first semester fourth-year student can spend a semester working, studying, and carrying out research in Washington, D.C., for a full semester's academic credit. The Washington Program is designed to provide a student, regardless of major, an opportunity to 1 ) bring together past and current academic study with practical experience; 2) come to a better understanding of the political process and the formulation of public policy; 3) develop critical and analytical skills; and 4) pursue independent research under the guidance of a faculty sponsor. Admission to the Washington Program is highly competitive. Washington students have worked in congressional offices, research groups, federal agencies, museums, and public interest organizations.

DCSP 381 - Washington Seminar
Fall, spring
This seminar is intended to give students an opportunity to examine the policy process in the United States. The class will explore the grounds on which specific policies are advocated and will discuss the aims of public policy. Students read and discuss a number of appropriate texts. The seminar includes discussion of current events and may incorporate perspectives on the students' internships and their
research projects. One unit.
DCSP 382 - Washington Internship
Fall, spring
An internship (four days per week) with a Government office, a lobby group, a museum, a federal agency, or other Washington-based organizations offering a well-supervised position requiring initiative and responsibility. One-and-a-half units.
DCSP 383 - Washington Research
Fall, spring
A research project culminating in a substantial research paper ( $30-40$ pages). Each intern, in consultation with an on-campus faculty sponsor, chooses a research topic early in the term. The research paper will be both closely related to the student's internship responsibilities and useful to the Washington agency which serves as the site for the internship. The intern is expected to make good use of the resources of his/her agency and of Washington contacts to produce a paper which reflects the Washington experience. One-and-a-half units.

## Academic Internship Program

Academic Internships are comprised of two components: fieldwork at an internship site in Worcester or the greater Boston area and academic work in an internship seminar, such as Ethical Issues in Professional Life, Social Justice, or Legal Issues. If a seminar topic is not appropriate to the internship, tutorial work with an individual faculty sponsor may be arranged. Each student is expected to spend eight hours per week on the job and another three or four hours on the academic component. One unit of academic credit is granted for the Academic Internship. Admission is open to third- and fourth-year students by application.
ACIP 379-01 — Academic Internship
Fall, spring
An independent internship arranged by the student with a faculty sponsor. The internship commitment is 8 hours per week. The student meets with the faculty sponsor in a weekly tutorial as well. One unit.
ACIP 379-02 - Management/Leadership Seminar
Fall, spring
The seminar focuses on the characteristics of effective leaders and effective organizations of all kinds-business, government, education, and not-for-profit. Each student uses the organization at which he or she is an intern as the model for analysis of each of the topics discussed. Topics include the components of typical organization, creating shared aims and values, defining the expected results, achieving customer satisfaction, focusing on people and encouraging innovation. The classes involve lectures, discussion of assigned reading, and discussion of situations drawn from the internship experiences of the class members and the professional experiences of the instructor, a senior executive. One unit.
ACIP 379-03 - Legal Issues Seminar
Fall, spring
Is the law a profession or a business? This course is designed to provide a unique opportunity for students contemplating a career in the law to examine that question. The course will explore the ethical underpinnings of the legal profession by examining codes of conduct governing both lawyers and judges. The art of negotiation is an essential study for anyone interested in law, public policy or international relations. This course will examine the current trends in alternative dispute resolution, including mediation and arbitration. One unit.

## ACIP 379-04 - Health Care Management Seminar

Fall, spring
The health care industry, which has been big business for some time, has become even more pervasive in the United States. In doing so, it has changed the way we live. It has medicalized much of life. It has prompted debate on our fundamental definitions of life and death, aroused concern about cost, equitable access and the quality of care giving, and it has triggered unpopular social policies. But who are the principles and practitioners involved in both the medical marketplace and the delivery of health care? The answers are, in part, found by carefully examining the range of issues; e.g. economic, medical, political, social, and moral. The principal goal of this seminar is to provide a forum for critical analysis of health care in the United States. The seminar component, with relevant readings and discussion, provides additional depth to the student's internship experience by helping the student to develop a
more coherent and thorough understanding of our health care delivery system-its strengths, problems, and weaknesses. One unit.

## ACIP 379-05 — Professional Ethics Seminar

Fall, spring
This course is designed for students participating in professional internships 8 hours each week in a variety of fields. Using both historical and contemporary texts the course examines the meaning of professionalism and professional ethics. By analyzing cases from medicine, law, education, journalism, politics, corporate business, and engineering, this course helps the student to begin to formulate his or her own professional identity. Students not enrolled in an academic internship through CISS may participate in "P4C", a project in teaching philosophy to elementary school pupils from 4th-8th grades. These students will go to an elementary school one day each week to conduct philosophical dialogues, and conduct research into philosophy with children. One unit.

## Donelan Program of Community-Based Learning

Through a generous endowment established by its namesake, Joseph P. Donelan II, the Donelan Office of Community-Based Learning provides a directorship to establish connections between courses across the College curriculum with internship sites in the Greater Worcester Area. In keeping with the College's social mission to prepare students to be "men and women for others," Community-Based Learning enables students to be of service to the community while enhancing their understanding of course material. Recent courses with a community service component have included: WMST 120 Intro to Women's Studies, LALS 294 Experience in Latino Education, WMST 220 Families and Fathers, all sections of ASL, HIST 200 Environmental History, RELS 328 Experience and Perspectives on the Church, SOCL 257 Aging and Society, and VAHI 235 Sacred Spaces.

## Marshall Memorial Fund

Through a bequest of James J. Marshall and Ellen O'Connor Marshall, the College has established a fund to encourage the creative and intellectual involvement of students and faculty with the Worcester Community. Support is available for service projects or research projects on any aspect of the historical, economic, cultural, or religious life of the city of Worcester. Funds are available on a competitive basis for any project that will enhance the quality of life in Worcester and build closer ties between the College and the community. Grants are awarded competitively each semester.

## Student-Designed Programs

## The Fenwick Scholar Program

The Fenwick Scholar Program provides one of the highest academic honors the College bestows. From among third-year students nominated by their major departments, the Fenwick Selection Committee, which includes the President of the College, and the Vice President for Academic Affairs and Dean of the College, selects the student(s) most worthy of this unique academic opportunity. The Scholar designs, with one or more advisors, a program of independent research or a project that will in effect be his or her entire curriculum for the senior year. Projects are expected to complete the Fenwick Scholar's undergraduate education in the most challenging, creative, and meaningful way. At the end of the fourth year, the Fenwick Scholar is required to give a public presentation to the College community, and to present an appropriate record of this achievement to the College library. Recent Fenwick projects have included a study of the psychopathology of depression, text and music in Balinese Shadow Theater, the development of embedding diagrams for General Relativity, and the role of humanism in the rise of a new musical aesthetic in Renaissance Italy, and Influences on Reading Instruction in Massachusetts Public Schools.

## Multidisciplinary Studies Program

This program allows students to design their own major or minor in a field of study that lies outside the current discipline-based majors or multidisciplinary concentrations described above. The Commit-
tee on Interdisciplinary and Special Studies approves, monitors, and administers all student-designed programs. These programs of study are academically rigorous and depend on a combination of significant student initiative and close interaction with faculty advisors. Conceptualizing the major or minor is the responsibility of the student and may, in some cases, be facilitated by using a faculty-designed template or general pattern for the major.

## Student-Designed Multidisciplinary Majors and Minors

A multidisciplinary major or minor must involve at least three disciplines and fall within the competence of the College faculty. The student presents a written proposal demonstrating a coherent progression of study. The proposal must include a statement of intellectual rationale for the proposed field of study, an outline of courses already taken, and a complete plan of proposed courses. Proposals are written in consultation with the Director of CISS and two faculty sponsors based in departments related to the proposed major/minor. Faculty sponsors provide letters of support assessing the program of study. If the plan is approved, the faculty sponsors and the CISS Director serve as an advisory committee responsible for approving changes in the major plan and giving guidance to the student undertaking the program. Students may design their minor from scratch, or use a faculty-designed template as a basis for their course work and study. Some of the more established major/minor programs follow.
Asian Studies: Students may plan a multidisciplinary major that is either regionally defined, focusing for example on the history, language, arts and cultures of East, South, or Southeast Asia, or a major that follows a theme throughout the Asian cultural sphere, such as the religions or arts of Asia. Majors will learn about contemporary political issues of the world's most populous regions and explore the impact of Asia on the wider world. Major only.
Film-Making: Students develop a curriculum with guidance from a template in either fiction film-making or documentary film-making. Minor only.
German Studies: Students plan a sequence of courses to develop an understanding of the cultural, social and political life of the German-speaking peoples in their historical and international context. The broad and multifaceted world of German-speaking peoples, with their substantial contributions to music, art, philosophy and literature, provides an essential perspective on the makeup of modern European civilization. Major or minor.
Environmental Studies: Students may plan a sequence of courses to develop an understanding of environmental problems-their causes and effects, as well as their potential solutions. Using an interdisciplinary approach, they will study both the relevant natural processes and the interplay between the environment and social, economic, and political institutions. They will learn how environmental policy and technology are linked to issues of wealth, poverty and social justice. Major only.
Medieval and Renaissance Studies: Students may focus a program of study on the cultural and political life of the pre-modern and early modern world. Spanning a period from the fourth to 17 th centuries in Europe and the Mediterranean basin, an interdisciplinary study of this historical epoch offers a foundation for understanding the interaction of cultures and religious traditions. Major or minor.
Middle Eastern Studies: Focuses on historical developments, political systems, cultural traditions, religious diversity, and domestic and foreign policy issues related to the region. Minor only.
Russian and Eastern European Studies: offers students courses in history, language, literature, political science, and religious studies in an attempt to analyze the distinctive traits of Russia and its people. Classes also focus on Central and Eastern Europe. Major or minor.

## Semester Away Program

Students who wish to engage in academic work not available at the College may submit proposals for a semester or academic year of study at another institution usually in the United States. For example, Holy Cross students have participated in the Sea Semester Program, co-sponsored by Boston University
and the Woods Hole Oceanographic Institute, and studied at Historically Black Colleges or Universities. Proposals for the Semester Away Program should be submitted no later than two weeks prior to the registration period of the semester that the student plans to be away from the College.

## Student Grant Program

Funds are available to support student research and participation in academic programs and national, regional, and state academic meetings. Travel to special libraries, archives, performances or exhibitions are also supported. Funds are awarded on a competitive basis each semester by the Committee on Interdisciplinary and Special Studies.

## The Venture Consortium

The Venture Consortium is a collaboration of nine colleges and universities organized to provide alternative work and study opportunities that complement liberal arts education, emphasize social responsibility and involvement, and forge links between higher education and the community at large. Member institutions include Bates College, Brown University, Holy Cross, Franklin and Marshall, Sarah Lawrence College, Swarthmore College, Syracuse University, Vassar College, and Wesleyan University. The programs described below are available through the Venture Consortium.

## The College Venture Program:

For students who wish to take a Leave of Absence from the College, the Venture Program offers a wide variety of temporary, full-time job opportunities in locations throughout the United States. Positions are available in the media, environmental agencies, social services, investment corporations, parks and recreation, public relations, social and medical research, preschool and elementary education and other fields. Most positions offer stipends and or housing in addition to the opportunity to explore career areas. Information about the College Venture Program is available in CISS and on the Venture Consortium Web site at: www.brown.edu/Administration/Venture/CV.html.

## Urban Education Semester:

A full semester of academic credit is awarded students accepted into Venture's Urban Education Semester. This program involves the interdisciplinary and experimental study of inner-city education through the Bank Street College of Education in New York City. Students enrolled in the program combine fieldwork in New York's public schools with coursework at the Bank Street College. Students are eligible to participate in this program during the spring semester of the second year, in either semester of their third year, or the first semester of the fourth year. Information about the Urban Education Semester is available in the Center for Interdisciplinary and Special Studies.

## Biology

Robert I. Bertin, Ph.D., Professor
George R. Hoffmann, Ph.D., Professor
Mary Lee S. Ledbetter, Ph.D., Professor and Chair
Kornath Madhavan, Ph.D., Professor
Kenneth N. Prestwich, Ph.D., Associate Professor
Madeline Vargas, Ph.D., Associate Professor
Robert M. Bellin, Ph.D., Assistant Professor
Cara M. Constance, Ph.D., Assistant Professor
Karen A. Ober, Ph.D., Assistant Professor
Ann M. Sheehy, Ph.D., Assistant Professor
William V. Sobczak, Ph.D., Assistant Professor
Leon Claessens, Cand. Ph.D., Instructor
Daron C. Barnard, Ph.D., Visiting Assistant Professor and Postdoctoral Fellow
Mary K. Bruno, Ph.D., Visiting Assistant Professor
Kelly S. Wolfe-Bellin, Ph.D., Visiting Assistant Professor
Michael J. Chapman, Ph.D., Lecturer
James M. Doyle, M.A., Senior Laboratory Supervisor
Catherine M. Dumas, M.S., Laboratory Supervisor
Peter J. Lemay, M.S., Laboratory Supervisor
The biology curriculum is designed to acquaint students with the broad scope of the biological sciences at several levels of functional organization. Its courses include molecular, cellular, organismal, ecological, and evolutionary aspects of biology. Departmental course offerings prepare biology majors for advanced study in graduate or professional schools and for other professional opportunities. The Department believes that an informed understanding of biological principles is an important aspect of a liberal arts education, and it therefore offers diverse courses that introduce non-majors to basic biological concepts and explore the implications of modern biology for various social and philosophical issues.

Biology majors are required to take at least eight biology courses, six with laboratory. Required courses include Biology 131 and 132 (Introduction to Biology with laboratory) and either Biology 261 (Genetics with laboratory) or an equivalent non-laboratory genetics course. They must also complete Chemistry 101, 221, 222, 231 (all with laboratory); Mathematics 131, 132, or the equivalent (Mathematics 133, 134; Mathematics 136; or appropriate Advanced Placement); and Physics 111, 112 (both with laboratory, Physics 113, 114) or the equivalent (Physics 115, 116 which include laboratories). Biology students normally complete the chemistry sequence before beginning their third year. A student must earn a grade of C or better in Biology 131 and 132 to continue in the major.

Since study beyond the undergraduate level is typically specialized, the Department encourages a balanced approach to the discipline by requiring its majors to include among their upper-division biology courses one course from each of the following broadly defined areas: (1) molecular and cellular biology, (2) organismal biology, and (3) ecological and evolutionary biology.

In addition to formal courses, the Department offers qualified students an opportunity to conduct research (Biology 401) in association with faculty members in their research laboratories. Opportunities also exist for students to pursue individual interests in faculty-directed readings courses based on biological literature (Biology 405). Students in the College Honors Program must elect Biology 407, 408.

## Biochemistry Concentration

The Departments of Biology and Chemistry jointly offer a concentration that focuses on the study of the chemistry underlying biological structure and function. Concentrators must be enrolled as either biology or chemistry majors. Participants take Biology 131 (or 120), 301, and 302 with laboratories; Chemistry 101, 221, 222, 231, and 255; and one additional biology course with an associated biochem-
istry-oriented laboratory, in addition to the usual courses required of their major. Concentrators must also complete a two-semester thesis project in their fourth year involving research on some aspect of biochemistry. Admission to the concentration is competitive and occurs in the second semester of the second year. Interested students should contact the Concentration Coordinator or the Chair of either department.

## Biological Psychology Concentration

The Departments of Biology and Psychology jointly offer a concentration that concerns the study of neuroscience and behavior. The concentration requires an understanding of various scientific fields including core areas of biology, psychology, chemistry, physics, mathematics, and computer science. Concentrators major in either biology or psychology, and have the opportunity to take courses designated as belonging in the concentration from either department. For Biology majors, additional requirements include Psychology 100 (Introduction to Psychology) and at least one of the four additional concentration courses from the Psychology Department. Students are exposed to original research throughout the concentration, and may elect to conduct thesis research in their fourth year. If not, they must take a fifth course from among those designated for the concentration. Admission to the concentration is competitive and is limited to eight students per class year. Interested students should consult with the Concentration Coordinator or the Chair of the Biology or Psychology Department prior to registering for second-year courses.

Advanced Placement Credit: Students with AP credit in Biology do not receive credit toward the minimum number of course required by the major or advanced standing in the Biology curriculum.

## Courses

## Biology 114 - Topics in Biology

Annually
Consideration of diverse subjects in the biological sciences. Course format and subjects vary from year to year; the specific subject matter for each course is announced prior to the enrollment period. Recently taught topics include evolution, vertebrate history, unseen world of microbes, cancer, human heredity, plant life, exercise physiology, environmental biology, biological chemistry of health and disease, health and metabolism, human reproduction, and genetic engineering. Intended for nonmajors. One unit.

## Biology 120 - General Biology 1

Fall
Fundamental principles of biology studied at the molecular and cellular levels of organization. Intended for third-year premedical students majoring in subjects other than biology. Includes laboratory. Prerequisite or Corequisite: Chemistry 222. One and one-quarter units.
Biology 121 - General Biology 2
Spring
A continuation of Biology 120. A study of levels of biological organization from tissues to populations and the diversity of life. Includes laboratory. Prerequisite: Biology 120. One and one-quarter units.
Biology 131 - Introduction to Biology 1 Fall
Selected topics emphasizing biological organization from molecules to ecosystems. Designed for biology majors, this course is prerequisite for upper-division courses in the Department. Includes laboratory. One and one-quarter units.

Biology 132 - Introduction to Biology 2
Spring
A study of the structure, function, diversity, and evolution of plants and invertebrates. Includes laboratory. Open to biology majors and prospective biology majors. One and one-quarter units.
Biology 213 - Comparative Chordate Morphology
Fall
The comparative anatomy of the chordate body with reference to the structure and function of the skeletal, muscular, nervous, respiratory, circulatory, digestive, urogenital, and reproductive systems. These
systems will be compared among the various vertebrate groups in relation to biomechanics and evolution. Includes laboratory. Organismal biology. Prerequisite: Biology 131. One and one-quarter units.

## Biology 220 - Entomology

 FallAn introduction to insects covering diversity, morphology, physiology, ecology and behavior, as well as considerations of the economic and medical importance of insects. Includes laboratory. Organismal biology. Prerequisite: Biology 131 and 132. One and one-quarter units.
Biology 223 - Microbiology Fall
A comprehensive introduction to microbiology. This course provides an overview of microorganisms, including their structure and function, growth, ecology, genetics, taxonomy, and evolution. Emphasis is placed on prokaryotes and viruses. The laboratory emphasizes enrichment and pure culture methods, diagnostic microbiology, and physiology. Includes laboratory. Molecular and cellular biology. Prerequisites: Chemistry 101 and Biology 120 or 131. One and one-quarter units.

## Biology 230 - Developmental Biology <br> Alternate years in spring

The development of eukaryotic organisms from a comparative point of view. Emphasis is placed on possible molecular explanations of the major events and processes of classical embryology. The emphasis in the laboratory is on the application of techniques for visualization of gene activity and the elucidation of such processes as gastrulation, regeneration, and metamorphosis. Both plants and animals are considered. Includes laboratory. Organismal biology. Prerequisite: Biology 131. One and one-quarter units.
Biology 233 - Freshwater Ecology
Fall
A comprehensive introduction to the hydrology, chemistry, and ecology of freshwater ecosystems. The laboratory includes fieldwork in several ecosystems (lake, stream, and wetland) and laboratory work characterizing the chemistry and biology of these diverse ecosystems. Includes laboratory and field work. Ecological and Evolutionary Biology. Prerequisites: Biology 131 and 132. One and one-quarter units.
Biology 241 - Vertebrate Endocrinology
Alternate years
The anatomy and physiology of endocrine glands and internal secretion in representative vertebrates. Emphasis is placed on functional interrelationships of the endocrine organs, cellular effects of hormones, and hormonal mechanisms of action (receptors, second messengers, etc.). The functional morphology of the endocrine system of vertebrates is compared with that of invertebrates. Organismal biology. Prerequisite: Biology 131. One unit.
Biology 250 - Field Botany
Every third year in fall
An introduction to the local vascular flora, emphasizing identification of woody plants and plants flowering in the fall. The course will include training in use of field guides and technical keys and preparation of herbarium specimens. Includes laboratory and field work. Organismal biology. Prerequisite: Biology 132 or permission. One unit.
Biology 255 - Vertebrate History
Spring
A survey of vertebrate history as documented by fossils. Diversity and biology of living forms will be included in this context. To the extent that it is possible, we will consider functional aspects of the animal's morphology (why they looked as they did) and their ecology (how they lived). Organismal biology. Prerequisites: Biology 131 and 132. One unit.
Biology 261 - Genetics
Fall
The mechanisms of heredity and genetic analysis. Topics include Mendelian inheritance, chromosome structure and function, genetic mapping, molecular genetics, mutation, genetic regulation, and population genetics. Laboratory exercises emphasize genetic principles through experimental work with bacteria, fungi, vascular plants, and fruit flies, and interpretive studies in human genetics. Includes laboratory. Prerequisites: Chemistry 221 and Biology 131 and 132. One and one-quarter units.

Biology 262 - Principles of Genetics
Every third year in spring
The mechanisms of heredity and genetic analysis. Topics include Mendelian inheritance, chromosome structure and function, genetic mapping, molecular genetics, mutation, genetic regulation, and population genetics. This course is a nonlaboratory equivalent of Biology 261. Prerequisites: Chemistry 221 and Biology 131 and 132. One unit.
Biology 266 - Cell Biology
Spring
The structure and function of cells of higher organisms, both animal and plant, are considered along with aspects of metabolism and enzyme action. Special topics such as growth regulation or function of the immune system may be discussed according to student interest. The critical evaluation of experimental evidence is emphasized. Includes laboratory. Molecular and cellular biology. Prerequisites: Chemistry 221 and Biology 120 or 131. One and one-quarter units.
Biology 270 - Histology
Alternate years in spring
A study of the microscopic and submicroscopic structure of vertebrate tissues and organs. Includes laboratory. Organismal biology. Prerequisite: Biology 120 or 131. One and one-quarter units.
Biology 275 - Biological Statistics
Spring
An introduction to the handling, analysis, and interpretation of biological data. Topics include descriptive statistics, probability distributions, goodness of fit tests, hypothesis testing, analysis of variance, regression, and correlation. Prerequisites: Biology 120 or 131. One unit.
Biology 280 - General Ecology Fall
An introduction to the science of ecology. The interactions between living organisms and their environments are considered at the levels of the individual, the population, the community, and the ecosystem. Includes laboratory and field work. Ecological and evolutionary biology. Prerequisite: Biology 131 and 132. One and one-quarter units.

## Biology 283 - Evolution

Annually
An inquiry-based approach to the study of evolution and Darwin's theory of natural selection. Most attention will be devoted to empirical work that addresses conceptual issues in evolutionary biology, including natural selection, speciation, coevolution, sexual selection, molecular evolution, analysis of adaptation, evolutionary biogeography, and micro- versus macroevolution. Ecological and evolutionary biology. Prerequisites: Biology 131 and 132. One unit.

Biology 287 - Ethology and Behavioral Ecology
Annually
A comparative look at animal behavior and the evolutionary forces that shape it. Topics include physiological mechanisms of behavior, behavioral genetics and heritability, communication, foraging, competition and cooperation, mating and parenting systems, and social behavior. The importance of good experimental design and the proper role of modeling in behavioral studies are emphasized. Field projects are included. Ecological and evolutionary biology. Prerequisite Biology 131 and 132 or permission. One unit.
Biology 301 - Biochemistry 1
Fall
A detailed study of the chemistry of biological molecules. Topics include the structural chemistry of the major classes of biological compounds, enzyme catalysis, bioenergetics, metabolic regulation, glycolysis, gluconeogenesis, beta-oxidation of fatty acids, tricarboxylic acid cycle, electron transport chain and oxidative phosphorylation. Molecular and cellular biology. Prerequisites: Chemistry 222. One unit.
Biology 302 — Biochemistry 2
Spring
A continuation of Biology 301. Topics include the chemistry, enzymology and regulation of lipid, protein and carbohydrate metabolism, photosynthesis, DNA replication, transcription, and translation. Molecular and cellular biology. Prerequisite: Biology 301. One unit.
Biology 303 - Biochemistry 1 Laboratory
Fall
This laboratory accompanies Biology 301 and introduces students to experimental methods used for the purification and characterization of biological molecules through a multi-week, full-semester procedure.

While conducting the steps of this overall procedure, students gain experience with a wide range of biochemistry lab techniques including column chromatography, gel electrophoresis, Western blotting, and enzyme activity assays. This laboratory is taken as a fifth course; while figured into the GPA, it does not count as one of the 32 courses required for graduation. Prerequisite or corequisite: Biology 301 . One-half unit.

Biology 304 - Biochemistry 2 Laboratory
Spring
This laboratory accompanies Biology 302 and introduces students to the principles and methods of molecular biology as they relate to the modern practice of laboratory biochemistry. Through a multi-week, full-semester procedure, students are exposed to a wide-range of techniques including genomic DNA isolation, PCR, plasmid DNA construction, sequence analysis and recombinant protein expression. This laboratory is taken as a fifth course; while figured into the GPA, it does not count as one of the 32 courses required for graduation. Prerequisite or corequisite: Biology 302. One-half unit.

Biology 311, 312 - Problems in Biology
Annually
Courses at an advanced level on selected subjects in the biological sciences. Recent topics include microbial physiology, electrophysiology, genetic engineering, cell signaling, bioinformatics, neurobiology and neurological disease, and the physiology of movement. Distribution area depends on subject. One unit (Biology 312 includes a laboratory and receives one and one-quarter units).

Biology 320 - Molecular Genetics
Spring
The regulatory mechanisms controlling gene expression at the levels of DNA, RNA and protein are considered along with methodology used to study these molecules. Topics include DNA cloning, PCR analysis, the human genome project, RNA interference, microarray technology, and special topics such as regulation of development, circadian systems, and stem cells. Current literature is an integral part of the course. Includes laboratory. Molecular and cellular biology. Prerequisites: Biology 120, 261, 262, 266 or 301. One and one-quarter units.
Biology 331 - Ecosystem Ecology
Spring
The course covers the history of ecosystem ecology, biogeochemical cycles and budgets, ecosystem energetics and trophic structure, and the response of ecosystems to disturbance and human-accelerated environmental change. The latter part of the course emphasizes discussion of recent primary literature that contributes to the conceptual framework underlying the management and conservation of diverse ecosystems. Ecological and evolutionary biology. Prerequisites: Biology 131 and 132. One unit.
Biology 361 — Toxicology
Annually
The study of adverse effects of chemicals on biological systems. Topics include measurements of toxicity; dose-response relationships; the absorption, distribution, metabolism, and excretion of toxicants; toxicant interactions; target organs; mutagenesis; carcinogenesis; developmental toxicology; clinical, environmental, forensic, and regulatory toxicology; and toxins. Organismal biology. Prerequisites: Chemistry 222 and Biology 120, 261, or 262. One unit.
Biology 390 - Animal Physiology
Annually
A comparative approach to the functioning of cells, organs, and organisms. Major themes are homeostasis, control mechanisms, and adaptation to the environment. Topics include: excitable and contractile cell physiology, energy metabolism and temperature regulation, respiration and circulation, digestion, water balance, and coordination and control of these systems by neuroendocrine mechanisms. Includes laboratory. Organismal biology. Prerequisites: Chemistry 231 and Biology 120 or 131. Prerequisite or Corequisite: Physics 111 or 115 . One and one-quarter units.

The course examines the components of the immune system. It covers the genetics, structure and function of antibodies, immune receptors and messengers, tolerance, hypersensitivity, autoimmunity and immunodeficiency. Includes laboratory. Molecular and cellular biology. Prerequisites: Biology 120, 261, 262 or 266 . One and one-quarter units.

## Biology 401 - Undergraduate Research

Annually
Individual experimental investigation and associated study of the scientific literature under the direct supervision of a member of the faculty. The number of positions is limited; students contemplating research should make inquiries early in the year preceding the term in which research is to be initiated. Prerequisite: permission of instructor. One semester may be counted toward the biology major; additional semesters may be taken for college credit. One and one-quarter units.

## Biology 405 - Directed Reading

Annually
An in-depth literature study of a topic of interest to the student under the tutorial supervision of a member of the faculty. Prerequisite: permission of instructor. One unit.

## Biology 407, 408 - Honors Research

 AnnuallyIndividual experimental investigation and associated study of the scientific literature under the direct supervision of a faculty member. Students contemplating research should make inquiries early in the year preceding the term in which research is to be initiated. Open only to students in the College Honors Program. One and one-quarter units each semester.

## Chemistry

Richard S. Herrick, Ph.D., Professor
Ronald M. Jarret, Ph.D., Professor and Chair
Kimberly A. Frederick, Ph.D., Associate Professor
Jane M. Van Doren, Ph.D., Associate Professor
Frank Vellaccio, Ph.D., Associate Professor and Senior Vice President
Katherine B. Aubrecht, Ph.D., Assistant Professor
Joshua R. Farrell, Ph.D., Thomas E. D'Ambra Assistant Professor
Kenneth V. Mills, Ph.D., Assistant Professor
Kevin J. Quinn, Ph.D., Assistant Professor
Cathrine A. Southern, Ph.D., Assistant Professor
Timothy J. Brunker, Ph.D., Visiting Assistant Professor
Gail Lambert Edwards, Ph.D., Lecturer
Linda Lettko, Ph.D., Lecturer
G. Earl Peace, Ph.D., Lecturer and Assistant Dean

Jamie L. Herrick, M.S., Senior Laboratory Supervisor
Antonet de Souza-Goding, Ph.D., Laboratory Supervisor
Louise W. Guilmette, M.Ed., Laboratory Supervisor
The Department of Chemistry (www.holycross.edu/departments/chemistry) is numbered among the nation's top producers of chemistry graduates certified by the American Chemical Society. The curriculum combines a solid background in fundamental principles and theories of chemistry with handson experience using state-of-the-art laboratory equipment. Introductory courses in general (Chemistry 101 and 231) and organic chemistry (Chemistry 221 and 222) are based on a guided-inquiry approach. Fundamental concepts are first encountered in the laboratory; lecture sessions are used to discuss and elaborate on the laboratory experience. First-year chemistry and biology majors should take Chemistry 101 and 221, followed by Chemistry 222 and 231 in the second year. Premedical students can start the same sequence in either their first or second year.

It is strongly recommended that students with a grade below C in Chemistry 101 do not continue in the traditional chemistry sequence (see Chemistry 110). A student should obtain a grade of $C$ or better
in Chemistry 221 to continue in Chemistry 222.
The department strives to improve the verbal and written communication skills of students by emphasizing the importance of clarity in laboratory reports and oral seminars (required of all students who elect to do research). The required courses have been carefully chosen to reflect these goals while allowing considerable latitude in the choice of elective courses. With the permission of the Chair of the Department, a student may substitute certain upper-division courses in physics, biology, or mathematics for one chemistry elective.

The Chemistry Department offers qualified students an opportunity to conduct research (Chemistry $390,405 / 406$ and $407 / 408$ ) in association with faculty members for academic credit. Also, a limited number of summer research positions with monetary stipends are usually available on a competitive basis. No academic credit is given for summer research (and Chemistry 389). Undergraduate research is strongly recommended for those majors interested in attending graduate school for an advanced degree in chemistry.

## The Chemistry Major

All chemistry majors are required to take at least 10 chemistry courses. These must include the four introductory courses: Atoms and Molecules, Organic Chemistry 1, Organic Chemistry 2, and Introduction to Equilibrium and Reactivity, and the four advanced courses: Instrumental Chemistry and Analytical Methods 1, Modern Physical Chemistry, Classical Physical Chemistry, and Inorganic Chemistry. The advanced courses are usually taken during the third year. Three advanced laboratory courses (Analytical Methods 2, Physical Chemistry Lab, and Physical and Inorganic Chemistry Lab) are required and must be taken as overload courses. They do not count toward the 32 courses required for graduation. Chemistry majors must also take two semesters of General Physics with lab or General Physics in Daily Life, (usually during their second year) and Calculus through Math 132, 134 or 136. Students are strongly encouraged to take Math 241 or Physics 221 (in preparation for Physical Chemistry) and a course in biochemistry (Biology 301 or equivalent).

## Departmental Honors Program

To be eligible to graduate with Department Honors, a student must maintain a minimum GPA of 3.0 within the major and overall, successfully complete two years of research (Chemistry 405/406 and Chemistry $407 / 408$ ) and be nominated by his/her Research Advisor. Student proposals to substitute the second year of research with additional course work and/or a special project will also be considered.

## The Chemistry Minor

The chemistry minor is designed to give students exposure to each of the traditional chemistry disciplines. The chemistry minor consists of seven required courses: Atoms and Molecules, Organic Chemistry 1, Organic Chemistry 2, Introduction to Equilibrium and Reactivity, Instrumental Chemistry/ Analytical Methods 1, Inorganic Chemistry and either Classical Physical Chemistry or Modern Physical Chemistry. The prerequisites for physical chemistry courses are Math 132, 134, or 136 and two semesters of General Physics with lab or General Physics in Daily Life. Chemistry electives are open to chemistry minors with the proper prerequisites. Students may not enroll in the minor prior to the second semester of their second year.

## Biochemistry Concentration

The Departments of Biology and Chemistry jointly offer a concentration that focuses on the study of the chemistry underlying biological structure and function. Concentrators must be enrolled as either biology or chemistry majors. Participants take Biology 120 or 131, 301 and 302 with laboratories; Chemistry $101,221,222,231$ and 256 ; and one additional biology course with an associated biochemistry-oriented laboratory, in addition to the usual courses required of their major. Chemistry majors will take Biology 301 and 302 with labs during their third year (and delay taking Chemistry 266 and 268 until their fourth year). Concentrators also complete a two-semester thesis project in their fourth year involving research on some aspect of biochemistry. Admission to the concentration is competitive and occurs in the second semester of the second year. Interested students should contact the chair of either department.

Advanced Placement Credit: Students with AP credit in Chemistry do not receive credit toward the minimum number of courses required in the major or advanced standing in the chemistry curriculum.

## Courses

Chemistry 101 - Atoms and Molecules Fall
This introductory course leads students to explore in-depth the scientific method through the formulation and testing of hypotheses in the laboratory. Laboratory experiments (using modern instrumentation) lead students to discover basic principles, i.e., stoichiometric relationships, electronic configuration and molecular structure. Lectures will explain and expand upon laboratory results. This course is suitable for students seeking to satisfy the science distribution requirements. It is also the first course in the sequence for science majors and premedical students. One and one-half units.

## Chemistry 110 - Methods of Chemistry <br> Alternate years

Designed to reinforce problem-solving methods that are used in Atoms and Molecules, Organic 1, Organic 2, and Introduction to Equilibrium and Reactivity. The quantitative aspects of chemistry are emphasized. This course is not a prerequisite for any other chemistry course but will be helpful for those with a limited background in the sciences who plan to complete the four-semester introductory chemistry sequence (Chem 101, 221, 222, and 231). One unit.
Chemistry 141 - Environmental Chemistry
Alternate years Investigates the chemistry of the Earth's environment through systematic studies of our atmosphere, hydrosphere and lithosphere and the exchange and interplay between them. The primary focus of the course will be environmental change taking place today including those that threaten plant and animal habitats and pose hazards to human health. Understanding of our environment and current threats to it will be gained through a combination of readings, lectures, discussions, demonstrations, and problem sets. One unit.

## Chemistry 144 - Chemistry and Society Alternate years

Acquaints non-science majors with chemistry as a human endeavor and helps them acquire some appreciation of the benefits and limitations of science. Readings from the current popular and scientific literature are examined to illustrate the relationships of science to society. Some of the basic concepts and principles of chemistry necessary for an understanding of environmental problems will be considered in detail. One unit.
Chemistry 221 - Organic Chemistry 1
Spring
A study of organic compounds from the points of view of the chemistry of the functional groups, modern structural theory and reaction mechanisms. The chemistry of aliphatic hydrocarbons, alkenes, alkynes, benzene, and alkyl halides is introduced in a discovery mode. Substitution, addition and elimination mechanisms are studied in detail. Emphasis is placed on stereochemistry. One four-hour "discovery"
laboratory session per week is included. Students learn various techniques of separation, purification, and identification (chemical and spectroscopic) of organic compounds in the laboratory. There is an emphasis on one-step synthetic conversions which introduce the reactions to be studied in the lecture course. Prerequisite: Chemistry 101. One and one-half units.
Chemistry 222 - Organic Chemistry 2
Fall
A continuation of Chemistry 221. Alcohols, ethers, aldehydes, ketones, amines, carboxylic acids and their derivatives are studied. Aromatic substitution, acyl transfer and carbonyl condensation reactions are developed. The mechanistic implications and synthetic applications of these organic reactions are evaluated. One four-hour "discovery" laboratory session per week is included. Microscale synthetic techniques are included. Prerequisite: Chem 221. One and one-half units.
Chemistry 231 - Introduction to Equilibrium \& Reactivity
Spring
Focuses on studying and understanding the role equilibrium, thermodynamics and kinetics play in chemical systems. Specific topics include phase and chemical equilibria, colligative properties of solutions, acid/base equilibria, chemical kinetics, electrochemistry, thermodynamics including enthalpy, entroy and free energy, and gas laws. Laboratory focused, this course also introduces students to modern analytical instrumentation (UV-Vis Spectrophotometer, HPLC, GC-TCD) while developing critical wet chemical analytical techniques. Knowledge and skills gained in Chem 101, 221 and 222 will be built upon with an emphasis on obtaining quantitative understanding. One four-hour "discovery" laboratory session per week is included. Prerequisites: Chemistry 222 (or permission of Chair); one semester of college calculus. One and one-half units.

## Chemistry 255 - Modern Physical Chemistry

Annually
The course is a study of the basic concepts, principles and methods of modern physical chemistry. Physical chemistry asks "how?" and/or "why?" things happen as they do. Here, the emphasis will be on developing a deeper understanding of the microscopic properties that govern chemical phenomena. The topics covered may include quantum mechanics, statistical mechanics, spectroscopy, group theory, and computational chemistry. Prerequisites: Chemistry 231 and Mathematics 133, 134 or Mathematics 131, 132 or Mathematics 136 and Physics 111, 112 (with laboratory) or Physics 115, 116. A course in Multivariable Calculus (Mathematics 241) is highly recommended. One unit.

## Chemistry 256 - Classical Physical Chemistry

Annually
This course is a study of the basic concepts, principles and methods of classical physical chemistry. Physical chemistry asks "how?" and/or "why?" things happen as they do. Here, the emphasis will be on developing a deeper understanding of the macroscopic properties that govern chemical phenomena. The topics covered may include thermodynamics, chemical and phase equilibria, kinetics, reaction dynamics, statistical mechanics, and complex solution behavior. Prerequisites: Chemistry 231 Mathematics 133, 134 or Mathematics 131, 132 or Mathematics 136 and Physics 111, 112 (with laboratory) or Physics 115, 116. A course in Multivariable Calculus (Mathematics 241) is highly recommended. One unit.

## Chemistry 257 - Physical Chemistry Lab

Annually
This advanced laboratory course is designed to teach students modern instrumental and computational methods used in physical chemistry and to develop student research skills. Students investigate classical and modern physical principles utilizing a variety of experimental and computation methods. The course introduces advanced data analysis techniques and develops student abilities to interpret data and communicate results in professional technical reports. The course fosters greater independence in the lab and advanced laboratory skills. Experiments complement Modern and Classical Physical Chemistry (Chemistry 255 and 256). One four-hour laboratory per week. Overload. Prerequisite or Co-requisite: Chemistry 255 or 256 . One-half unit.

Chemistry 258 - Physical and Inorganic Chemistry Lab
Annually
This laboratory course is designed to teach students modern instrumental, synthetic and computational methods used in physical and inorganic chemistry. The course is equally divided between Physical and

Inorganic work. Students investigate major physical principles utilizing a variety of experimental and computation methods during the Physical half of the course. They perform experiments in synthetic inorganic chemistry and learn about methods of characterization during the Inorganic half of the course. Throughout the course, students further develop their abilities to analyze and interpret data and improve technical writing skills. The course fosters greater independence in the lab and advanced laboratory skills. Experiments complement Modern and Classical Physical Chemistry and Inorganic Chemistry (Chemistry 255, 256, and 301). One four-hour laboratory per week. Overload. Prerequisite or Co-requisite: Chemistry 255 and 256. One-half unit.

## Chemistry 266 - Instrumental Chemistry/Analytical Methods 1

Fall
The application of instrumentation to chemical research and analysis has had a dramatic impact on the field of chemistry. As chemists, we must understand how instrumentation works in order to exploit its capabilities. This course focuses on spectroscopic, chromatographic and mass spectrometric methods of analysis. Specific analytical techniques included are molecular and atomic UV-Vis spectroscopy, infrared spectroscopy, TLC, GC, HPLC, and mass spectrometry (GC-MS). Laboratory and lecture work emphasize understanding instrumental design, major analytical methods of analysis and method development. When the student finishes this course he or she should be able to understand how and/or why instruments are designed to operate according to certain specific criteria and make intelligent choices among several possible ways of solving an analytical problem. Furthermore, the student should have confidence in his/her ability to work with modern chemical instrumentation. Prerequisite: Chemistry 231. One and one-half units.

Chemistry 268 - Analytical Methods 2
Spring
A continuation of Chemistry 266. In this laboratory students continue to acquire first-hand experience with modern analytical instrumentation and develop their problem-solving skills. This course introduces fluorescence and electrochemical methods of analysis. It also emphasizes quantitative analysis and experimental design including a series of guided analytical research projects involving sample preparation and/or new methods of analysis and concluding with a student designed research project utilizing analytical methods and instrumentation. One four-hour laboratory per week. Overload. Prerequisite: Chemistry 266. One-half unit.

## Chemistry 301 - Inorganic Chemistry

Annually
Group theory and modern theories of bonding are used to discuss structural and dynamic features of inorganic compounds. The structure and bonding of transition metal coordination compounds are related to various reaction mechanisms. The principal structural and mechanistic features of transition metal organometallic chemistry are studied with emphasis on catalysis of organic reactions. The role of inorganic chemistry in biological systems is also explored. Prerequisite or Co-requisite: Chemistry 255 and 256 . One unit.
Chemistry 302 - Advanced Organic Chemistry
Every third year
Explores the methods and concepts used by organic chemists to study reactions. Topics include: acidity measurements, conformational analysis, stereochemistry, reactive intermediates and their characterization, kinetics, isotope effects, linear free energy relationships, and pericyclic reactions. In addition to discussing methods of carrying out detailed mechanistic studies, students continue to develop their skills in proposing rational mechanisms for transformations. Students read and discuss articles from the primary chemical literature on a weekly basis. Prerequisite or Co-requisite: Chemistry 256. One unit.
Chemistry 303 - Advanced Physical Chemistry
Every third year
Aims to acquaint the student with selected topics in physical chemistry. The course material will change yearly, depending on the needs of the students and the direction of the professor. Topics covered in the recent past include Biophysical chemistry, Lasers, Surface Chemistry, Statistical Mechanics, Group Theory and Its Chemical Consequences, and Thermodynamics. Prerequisites: Chemistry 255 and 256.

One unit.
Chemistry 304 - Synthetic Organic Chemistry
Every third year
Covers a selection of modern synthetic methods and reagents used in organic chemistry. Topics to be presented are oxidations, reductions, organometallic reaction, addition and elimination reactions, protecting group strategies, functional group interconversions, and enolated condensations. The course will slowly build upon each of the individual methods discussed to ultimately demonstrate their combined use in the synthesis of complex organic molecules. Prerequisite: Chemistry 222. One unit.
Chemistry 310 - Bioorganic Chemistry
Every third year
Focuses on chemistry of the major biochemical macromolecules: carbohydrates, proteins and nucleic acids. Topics discussed include structure determination and enzyme mechanisms relevant to chemical reactions involving these macromolecules. In addition, through the use of student presentations, the chemistry underlying the interaction of medicinal agents with these macromolecules is explored. Prerequisite: Chemistry 222 . One unit.
Chemistry 311 - Bioinorganic Chemistry
Every third year
This course is organized around the important biological proteins, enzymes and other biological systems that utilize metal ions. An important goal is to explain their functional/positional importance based on the chemistry at the metal center(s). Topics include bioinorganic systems such as photosynthesis, hemoglobin/myoglobin and other iron proteins, copper proteins, and the biochemistry of zinc. Current research efforts in the field are discussed to demonstrate the dynamic nature of the subject. Prerequisite: Chemistry 301. One unit.
Chemistry 313 - Atmospheric Chemistry
Every third year
Examines the complex chemistry of earth's atmosphere through case studies of current environmental problems including global warming, stratospheric ozone depletion, air pollution, and acid rain. The course will emphasize problem solving through active classroom discussion and assignments. Understanding, analysis and evaluation of both the technical and popular literature pertaining to these problems (and potential solutions) will be stressed. Prerequisite: Chemistry 256. One unit.
Chemistry 315 - Advanced Analytical Chemistry
Every third year
Focuses on advanced instrumental methods and how these methods can be applied to solve contemporary problems in the analytical sciences. Students use current literature to explore analytical methods and their applications. The focus of the course may change yearly. In recent years topics have included applications in art, archeology and forensics. Prerequisite: Chemistry 268. One unit.
Chemistry 317 - Nanotechnology
Every third year
Introduces students to nanometer scale material and devices. Materials in this size regime often possess unusual properties that have application in molecular electronics, medical diagnostics and devices, molecular motors, and self-assembly and surface chemistry. Students will read a variety of books and scientific articles from peer reviewed journals. Nanotechnology is a multidisciplinary field of study where projects often require collaborations between chemists, physicists, biologists and engineers. Students other than chemistry majors who have completed the prerequisites are encouraged to enroll to broaden both their and the classes perspective in this field. Prerequisites: Chemistry 222 and 231. One unit.
Chemistry 389 - Introduction to Research
Fall, spring
Involves a commitment to join a research group. Specific activities will be established with the individual Research Advisor but may include: attendance of group meetings, working on a lab or computer project with other group members, and/or reading/discussing literature related to group research. The course is by permission only. It is taken as an overload and receives no grade. It may be taken more than once. Interested students are invited to apply early in the fall or spring of the fourth, third, or second year. The
candidate's academic record will be reviewed to determine if the student could reasonably benefit from such a program. Prerequisites/Corequisites: Chemistry 222 or 231 . No units.
Chemistry 390 - Independent Research
Fall, spring
Involves an original and individual experimental investigation with associated literature study in one of the field of chemistry under the supervision of a member of the faculty. The culmination of all research projects will be a report. The course is by permission only. Interested students are invited to apply before the registration period in the spring of the second or third year or the fall of the third or fourth year. The candidate's academic record will be reviewed to determine if the student could reasonably benefit form such a program. Prerequisites: Chemistry 222 and 231. One unit.
Chemistry 405, 406 - General Research 1 and 2
Fall, spring
Involves an original and individual experimental investigation with associated literature study in one of the fields of chemistry under the supervision of a member of the faculty. The culmination of all research projects will be a report, as well as a presentation to be given during the spring semester. Students will be required to attend the weekly department seminar program (fall and spring). Chemistry 405 is the first course of the consecutive two-semester research experience. Carries no course credit; it is taken as an overload, on an "in-progress" basis. A grade will be given upon completion of Chemistry 406, which carries one and one-half units. Satisfactory completion of Chemistry 405 is a prerequisite for Chemistry 406. Each course is by permission only. Interested students are invited to apply before the registration period in the spring of the second or third year. (Fall registration requires approval of the Department Chair.) The candidate's academic record will be reviewed to determine if the student could reasonably benefit from such a program. Prerequisites: Chemistry 222 and 231. One and one-half units.
Chemistry 407, 408 - General Research 3 and 4
Fall, spring
This program builds on the experiences gained in Chemistry 405 and 406. The second year of research provides the opportunity for further in-depth investigations. The culmination of all research projects will be a report and oral presentation to the chemistry faculty during the spring semester. Students will be required to attend the weekly departmental seminars program (fall and spring). Chemistry 407 is the first course of the consecutive two-semester research experience. Carries no course credit; it is taken as an overload, on an "in-progress" basis. A grade will be given upon completion of Chemistry 408, which carries one and one-half units. Chemistry 408 can not be counted toward the required minimum number of chemistry courses. Satisfactory completion of Chemistry 407 is a prerequisite for Chemistry 408. Both Chemistry 407 and 408 are by permission only. Interested students are invited to apply before the registration period in the spring of the third year. (Fall registration requires approval of the Department Chair.) The candidate's academic record to date, with particular attention given to performance in Chemistry 405 and 406 , will be reviewed to determine if the student could reasonably benefit from such a program. Prerequisites: Chemistry 405 and 406 . One and one-half units.

## Classics

Thomas R. Martin, Ph.D., Jeremiah W. O'Connor Jr. Professor and Chair
Blaise J. Nagy, Ph.D., Professor
Nancy E. Andrews, Ph.D., Associate Professor
John D. B. Hamilton, Ph.D., Associate Professor
Ellen E. Perry, Ph.D., Associate Professor
D. Neel Smith, Ph.D., Associate Professor

William J. Ziobro, Ph.D., Associate Professor
Mary K. Ebbott, Ph.D., Assistant Professor
George E. Ryan, Ph.D., Visiting Assistant Professor
Edward J. Vodoklys, S.J., Ph.D., Senior Lecturer
The curriculum of the Classics Department affords students the opportunity to study the Greek and Roman sources of Western culture. Courses are available in Greek and Latin at the introductory, intermediate, and advanced levels. For the major and non-major alike, there are offerings in Greek and Roman history, politics, philosophy, religion, mythology, and literature-none of which presupposes any knowledge of the ancient languages. With two archaeologists on its staff, the Department also offers
courses in Mediterranean archaeology at various levels, from beginning to advanced. The overall aim of the Department is to enhance the cultural background and the language skills of all its students through a variety of instructional methods. Resources, such as the Perseus Project and the Thesaurus Linguae Graecae, are available in the Department's recently inaugurated St. Isidore of Seville Computer Lab, where students can pursue individual research projects using open-source software and where seminars take place in which information technology is an important component.

For the student who chooses Classics as a major, the Department offers a wide selection of courses, seminars, and occasional tutorials that provide a comprehensive view of the ancient civilizations of Greece and Rome. The program for majors is designed to develop a command of the Classical languages, to introduce the student to the techniques of textual and historical analysis, and to survey the Greek and Roman worlds through literary, historical and archaeological evidence. The Classics major thus acquires a familiarity with the subtleties and intricacies of inflected languages, an ability for creative expression through the accurate translation of prose and poetry, and a critical knowledge of the texts, material culture and institutions which form the foundations of Western Civilization. In addition, the classroom experience can be enhanced by participation in first-rate study abroad programs in Rome and Athens. Recent Classics majors have pursued advanced degrees at several of the finest institutions of higher learning in the country, and have followed careers in secondary school teaching, journalism, law, business, medicine, banking, and software development, among others.

A minimum of 10 courses is required for a major in Classics. To satisfy the language requirements of the Classics major, a student will typically take at least one semester of an author-level course in one of the languages (Greek or Latin) and complete the intermediate level in the other. Normally, majors take no fewer than eight courses in the original languages. Adjustments to the language requirements can be approved by the chair of the Department.

The Department offers three merit scholarships-two Rev. Henry Bean, S.J., Scholarships (annually) and the Rev. William Fitzgerald, S.J., Scholarship (every four years)-to incoming students with distinguished academic records who major in the Classics at Holy Cross. Recipients of these scholarships are granted full tuition, independent of need. Each scholarship is renewable annually, provided that the student maintains a strong academic record and continues to be a highly visible Classics major. Candidates should address inquiries to: Classics Department, College of the Holy Cross, Worcester, MA 01610. The application deadline is February 1.

Advanced Placement Credit: Students with AP credit in Latin may be placed in 300-level Latin courses but do not normally receive credit toward the major.

## Courses

## Latin

Latin 101, 102 - Introduction to Latin 1, 2
Annually
A grammar course introducing the student to the Latin language and its literature. One unit each semester.
Latin 213, 214 - Intermediate Latin 1, 2
Annually
For students who have completed two years of pre-college Latin or Latin 101 and 102. This course includes a brief grammar review and selected readings from Latin authors. One unit each semester.

Latin 315, 316 - Readings in Latin 1, 2
Annually
A survey of Latin Literature from its early remains to the Silver Age. Selected authors are read in the original with analysis and discussion of each text. Prerequisite is Latin 214 or the equivalent. One unit each semester.
For all Latin courses at the 300 level, the prerequisite is either Latin 214 (Intermediate Latin 2), Latin 315 (Readings in Latin), or their equivalent. Students without these specific prerequisites should consult the Chair of the Department.

Extensive readings from the works of Sallust and Livy. Study of the sources and methods of Roman historiography. One unit.
Latin 321 - Tacitus, Major and Minor Works
Every third year
Concentrates on the Annales of Tacitus. Consideration is given to the Historiae, Agricola, and Germania. One unit.

Latin 322 - Cicero's Speeches
Every third year
Selected orations of Cicero are read in the original. Emphasis is placed on rhetorical analysis and on the interpretation of historical and political developments of the first century B.C. One unit.
Latin 323 - Roman Letter Writers
Every third year
Selected letters of Cicero and Pliny are read in the original Latin, while those of Seneca are read in English. Consideration is also given to historical background and to the development of letter writing as a literary form. One unit.
Latin 324 - Juvenal
Every third year
A detailed study of selected satires of Juvenal. Although emphasis is placed on the literary analysis of satire, some attention is also given to Juvenal's works as a source for understanding first century A.D. Rome. One unit.

## Latin 325 - Petronius

Every third year
A textual analysis of the Satyricon and its reflection of the reign of Nero and the social, religious, and political developments in the first century A.D. One unit.
Latin 334 - Lucretius
Every third year
An extensive examination of the poetic and philosophic message of Lucretius' Epicurean poem, De rerum natura. One unit.

Latin 336 - Cicero's Philosophical Works
Every third year
A study of Cicero's position in the Greco-Roman philosophical tradition through an examination of selections from his essays. One unit.

## Latin 343 - Horace: The Odes

Every third year
Selected poems from the four books of Odes are read in the original. Emphasis is placed on literary analysis and interpretation. In addition, students read a sampling of Horace's other poetic works in the original. One unit.

## Latin 344 - Catullus

Every third year
A literary study and analysis of all the poems of Catullus. One unit.
Latin 346 - Horace: The Satires
Every third year
Substantial portions of Books I and II are read. Appropriate attention is paid to the background of the satire genre and to the historical context of the poems. One unit.
Latin 350 - Early Christian Literature
Every third year
Reading in the original of selected works from the Patristic period. This course can count toward fulfillment of the Religious Studies major. One unit.
Latin 358 - Vergil: Aeneid
Every third year
A study of Vergil's epic with emphasis on its literary artistry. Six books of the poem are read in the original Latin. One unit.
Latin 359 - Vergil: Eclogues and Georgics
Every third year
The development of pastoral and agricultural poetry, as exemplified in Vergil's two poetic masterpieces, Eclogues and Georgics. One unit.

## Latin 363 - Roman Comedy

Every third year
Selected plays of Plautus and Terence read in Latin, combined with a study of Greek sources of Roman comedy. One unit.

Latin 366 - Ovid's Metamorphoses Every third year
A close examination of the literary artistry of a number of individual stories in the Metamorphoses. One unit.

Latin 401, 402 - Tutorial Seminar Department Consent Required.
Annually
Designed for selected students with approval of a professor and the Department Chair. This work may be done for one or two semesters. One unit each semester.

## Greek

Greek 101, 102 - Introduction to Greek 1, 2
Annually
A first course in Greek language involving a systematic investigation of Attic or Homeric Greek through a logical and intensive study of grammar, syntax, and vocabulary. One unit each semester.
Greek 105 - Intensive Introduction to Greek
Spring
Greek grammar, covered in one semester, with a view toward preparing the student for Intermediate Greek. One unit.

Greek 213, 214 - Intermediate Greek 1, 2
Annually
Readings and textual study of Greek prose and poetry. Prerequisite Greek 101 and 102 or Greek 105, or the equivalent. Students without the prerequisite should consult the department. One unit each semester.
For all Greek courses at the 300 level, the prerequisite is Greek 214 (Intermediate Greek 2) or its equivalent. Students without this specific prerequisite should consult the chair of the Department.

## Greek 326 - Plato: Selected Dialogues

Every third year
A study of selected Platonic Dialogues. One unit.
Greek 330 - Greek Lyric Poetry
Every third year
A survey in the original Greek of the major writers of drinking and fighting songs, of political and personal songs, and of sports and love songs from about 650 B.C. to 450 B.C. Knowledge (at least through English translation) of Homer, Hesiod and the Homeric Hymns is presumed. One unit.
Greek 332 - Homer
Every third year
A reading of selected books of the Iliad and/or Odyssey with special attention to their literary value as well as to problems of oral composition, metrics, linguistics, authorship and text history. One unit.
Greek 340 - Herodotus
Every third year
An examination of selected passages from Herodotus' account of the Persian Wars. One unit.
Greek 341 — Thucydides
Every third year
An in-depth survey of Thucydides' history of the Peloponnesian War. Extensive selections of historical and literary significance are read in the original Greek. One unit.
Greek 354 - New Testament Greek
Every third year
Readings from the original Greek text of various New Testament books. Emphasis is on translation, with attention to differences between NT authors as well as to the distinctive features of NT Greek. Historical situation and theology will be discussed in the course of translation. This course can count toward fulfillment of the Religious Studies major. One unit.
Greek 360 - Aeschylus
Every third year
A detailed study of the Agamemnon and other dramas of Aeschylus in the original. One unit.
Greek 361 - Sophocles
Every third year
The text of the Life of Sophocles and selected plays; investigation of the origin of the Greek theatre and its physical structure; extensive investigation of recent literary criticism of Sophocles. One unit.
Greek 362 - Euripides
Every third year
An analysis of two plays in Greek, with special attention to Euripides' dramatic technique. One unit.

## Greek 363 - Aristophanes

Every third year
Selected plays are read in the original. Historical backgrounds, literary interpretation, and study of comedy as a genre, are emphasized. One unit.
Greek 401, 402 - Tutorial Seminar
Annually
Designed for selected students with approval of a professor and the Department Chair. This work may be done for one or two semesters. One unit each semester.

## Classics (In English)

Classics 101 - Ancient Greek Literature and Society
Alternate years
An integrated study of the literature, cultural achievements, history, and society of Classical Greece from the time of Homer to the age of Plato. One unit.
Classics 102 - Ancient Roman Literature and Society
Alternate years
Study of Roman literature and civilization from approximately 200 B.C. to A.D. 130, which traces Rome's journey from flourishing Republic, through the trauma of revolution, to the reigns of the emperors. One unit.
Classics 103 - Greek and Roman Epic Alternate years
Readings in Homer, Apollonius, and Vergil. One unit.
Classics 107 - Revenge and Justice/Greek Tragedy
Alternate years
The subject of this course is the constant quest for an understanding of justice, as presented in selected dramas of Aeschylus, Sophocles, and Euripides, as well as in later tragedy (e.g. Seneca, Shakespeare, Racine). One unit.

## Classics 109 - Classical and Biblical Sources of European and English Literature

Alternate years
This course will primarily examine how certain themes, typological figures and universal truths which are developed in Biblical and Classical literature have been adapted to new circumstances and handed down over the past two millennia. The other main focus of the course will be daily in-class writing assignments based on class discussions which will allow students to develop their creative and critical writing skills. One unit.

Classics 112 - Greek Myths in Literature
Fall, spring
Comparison of Classical and modern versions of several ancient Greek myths. The relationships between myth and literature are considered, as well as reasons why these myths have endured through the centuries. Emphasis is on dramatic versions of the myths; narrative poetry and other genres such as music and cinema may also be explored. One unit.
Classics 120 - Mythology
Fall, spring
An exploration of the significance of myths, their meanings and functions in the cultures of Greece and Rome. Special attention is given to more recent developments in the study of myths and their relation to rituals and folk tales. Babylonian, Egyptian, Hindu and American Indian mythology may be used for comparative purposes. One unit.
Classics 121 - Ancient Science
Every third year
A study of the goals, methods and subject matter of Greco-Roman science. This course pays special attention to how science relates to the broader social, religious and intellectual context of the ancient world. One unit.
Classics 122 - Archaeology of Pompeii
Every third year
This course examines the ancient city of Pompeii, with particular emphasis on the houses in which families lived. Domestic spaces both reflected and reinforced certain family structures, and so the houses of Pompeii provide us with information about subjects as varied as the power of the father, ancient slavery, the experience of childhood, the role of women, and ancient notions of public and private space, all of
which topics will be addressed in this course through an examination of material culture. For purposes of comparison, the course will also briefly investigate the domestic spaces of the nearby site of Herculaneum, as well as other Italian sites like Cosa and Ostia. One unit.

## Classics 131 - Classical America

Annually
A study of the influences of the Classical tradition on the educational system, the political philosophy, and the art and architecture of early America. One unit.
Classics 141 - History of Greece 1: Classical Fall
A study of Greek history from its beginnings to the death of Alexander. Emphasis is placed on a close analysis of the primary sources, many of which are now accessible through computer technology. This course can count as an elective course toward fulfillment of the History major. One unit.
Classics 142 - History of Greece 2: Hellenistic
Spring
Topics covered include the shift of power from Greek city-states to Macedonian kingdoms; effects of the conquests of Alexander the Great; the cultural interaction between Greece, Egypt, and the Near East; and the rise of Rome to world power. This course can count as an elective course toward fulfillment of the History major. One unit.
Classics 143 - Athenian Democracy
Every third year
An analysis of the institutions, literature, and political thought inspired by the democracy of fifth-and fourth-century Athens. One unit.
Classics 151 - History of Rome 1: Republic
Spring
A survey of Roman civilization from the Regal period to the late Republic, with a special focus on the political and social forces that led to the establishment of the Principate. The course will concentrate on the primary sources for this period, including the historians, inscriptions, and monuments. Classics 151 can count as an elective course toward fulfillment of the History major. One unit.
Classics 152 - History of Rome 2: Empire Fall
A survey of Roman imperial civilization from the first to the sixth century. The course will concentrate on the primary sources for this period, including the historians, inscriptions, monuments, and coins. Classics 152 can count as an elective course toward fulfillment of the History major. One unit.
Classics 160 - Introduction to Classical Archaeology
Fall, spring
An introduction to the discipline of archaeology through a survey of important remains from the GrecoRoman world. The course pays special attention to how archaeology relates to other approaches to the study of the Classical world (history, art history, Classical studies). This course can count toward fulfillment of the Visual Arts major. One unit.
Classics 261 - Ancient Coins
Every third year
This course considers a series of problems illustrating different ways that coins inform us about ancient society, including coins as evidence for the ancient economy and the development of portraiture in art, coins as propaganda devices, and how coins differ from other archaeological and historical source material. Topics will range chronologically from the invention of coinage in the seventh century B.C. to the reforms of the Roman emperor Diocletian in the third century A.D. This course can count toward fulfillment of the Visual Arts major. Prerequisite Classics 160. One unit.
Classics 262 - Greek Sculpture
Alternate years
This course covers the development of Greek sculpture from the Early Bronze Age up to Rome's arrival in Greece in the second century B.C. Topics will include the representation of the human form, the use of art as political propaganda and as an expression of piety toward the gods, Egyptian and Near Eastern influence on Greek art, workshop and regional styles, and the problem of identifying work by "Great Masters." This course can count toward fulfillment of the Visual Arts major. Prerequisite CLAS 160. One unit.

This course covers the three major genres of Roman sculpture-portraits, historical reliefs and mythological sculpture. Specific topics to be considered include the use of art for political propaganda, the demands and effect of private patronage, the influence of class and gender politics, and the imitation of Greek, Etruscan and Egyptian styles by Roman artists. This course can count toward fulfillment of the Visual Arts major. Prerequisite Classics 160. One unit.
Classics 264 - Ancient Sanctuaries and Religion
Every third year
A detailed study of the archaeological remains from ancient sanctuaries. The buildings and monuments are studied in connection with other evidence for religious behavior in the different ancient cultures. The emphasis is on the cults and shrines of Ancient Greece and Rome but in different years, the ancient Near East and Egypt also are considered. This course can count toward fulfillment of the Visual Arts major. One unit.

Classics 265 - The Archaeology of Egypt
Every third year
This course investigates ancient Egypt with a view to providing a basic background to that culture's architectural and artistic monuments as well as to objects that teach us about daily life in ancient Egypt. Specific themes and topics will include the history and monuments of ancient Egypt; burial and notions of the afterlife; religion and the gods; the principles of Egyptian art; daily life, and changing notions of kingship and authority over time. The course will cover the Predynastic period through the early development of Christianity. Special attention will be paid to interactions between Egypt and the rest of the Mediterranean world, including Greece and Rome. This course can count toward fulfillment of the Visual Arts major. Prerequisite Classics 160 . One unit.

Classics 266 - Painting \& Mosaic
Every third year
This course introduces students to the art of mural (wall) painting in the Mediterranean from the Bronze Age through Late Antiquity, and to the art of mosaic from its origins in Classical Greece through Late Antiquity. Topics addressed will include the techniques of fresco and mosaic; the relationship of mural painting to lost panel paintings by famous artists; the social meaning of wall and floor decoration in the ancient world; the roles of artist and patron; the Roman response to Greek painting and mosaic; and the Christian response to pagan painting and mosaic. One unit.
Classics 268 - Art and Archaeology of Archaic Greece
Every third year
This course considers Greek art from about 700 B.C. to about 480 B.C. We will focus on the development of characteristic forms of artistic expression in the context of the emerging social, religious, economic and political institutions of the Greek polis. This course can count toward fulfillment of the Visual Arts major. Prerequisite Classics 160. One unit.
Classics 361 - Archaeological Field Work Seminar
Every third year
Working hands-on with unpublished material from current archaeological fieldwork in ancient Lycia, students will become familiar with the entire range of activities involved in archaeological fieldwork, from planning and prospecting on site, through field survey, excavation and post-field analysis. Prerequisite Classics 160. One unit.

Classics 401, 402 - Tutorial Seminar
Annually
Designed for selected students with approval of a professor and the Department Chair. This work may be done for one or two semester. One unit each semester.

## Economics

Charles H. Anderton, Ph.D., Professor
John R. Carter, Ph.D., Professor
Thomas R. Gottschang, Ph.D., Professor
John F. O'Connell, Ph.D., Professor
Nicolas Sanchez, Ph.D., Professor
David J. Schap, Ph.D., Professor
Nancy R. Baldiga, M.S., C.P.A., Associate Professor, Chair
Miles B. Cahill, Ph.D., Associate Professor
David K.W. Chu, Ph.D., Associate Professor
Katherine A. Kiel, Ph.D., Associate Professor
John D. O’Connell, M.B.A., C.P.A., Associate Professor Emeritus
Kolleen J. Rask, Ph.D., Associate Professor
Scott Sandstrom, M.S., J.D., C.P.A., Associate Professor
Robert W. Baumann, Ph.D., Assistant Professor
Melissa A. Boyle, Ph.D., Assistant Professor
Victor A. Matheson, Ph.D., Assistant Professor
Neva K. Novarro, Ph.D., James N. and Eva Barrett Fellow in Ethics and the Liberal Arts, Assistant Professor
Karen Teitel, Ph.D., Assistant Professor
Debra J. O'Connor, Cand. Ph.D., Visiting Instructor
Kevin J. Deedy, M.B.A., C.P.A., Lecturer
Karen A. Gammell, M.B.A., C.M.A., Lecturer
Lorna S. Gross, Ph.D., Lecturer
William F. Mosher, Cand. Ph.D., Lecturer
The Economics Department offers majors and minors in two distinct subject areas: economics and economics-accounting. Also offered is a select honors program. Introductory and intermediate-level courses are also available for non-majors. Members of the Department are dedicated teachers who value the opportunity at Holy Cross to interact closely with their students. They are also productive scholars, whose research has been published in leading economics and accounting periodicals.

## The Economics Major

Economics can be defined as the study of how people allocate scarce resources among competing ends. It can also be understood as a particular way of thinking distinguished by its axioms, concepts, and organizing principles. In terms of both subject matter and methodology, economics provides important and powerful insights into the human experience. Completion of the major can serve as preparation for graduate study, or it can provide a strong background for any one of a large number of careers, particularly those in business, law, health care, and government.

The economics major is designed to provide students with the theory and methodology required to analyze a wide range of economic issues. The minimum requirement for the major is nine semester courses in economics. Five of the courses in economics are specified and cover principles ( 2 semesters), intermediate theory ( 2 semesters), and statistics. The remaining courses are electives that apply and/or extend the previous learning to an array of more specialized topics, including, for example, economic growth and development, monetary theory, international trade, economics of law, and human resource economics. The principles and statistics requirements can be satisfied by advanced placement, but majors must still complete at least nine economics courses. The maximum number of courses in the department which may be taken by an economics major is 14 .

Because mathematics plays an important role in economics, majors are required to take one year of college calculus or its equivalent. The calculus requirement may be fulfilled by taking Mathematics 125 and 126 or Mathematics 131 and 132 (or Mathematics 133 and 134), or by advanced placement (a score
of 4 or 5 on the BC exam), or by the successful completion of a semester course (e.g., Mathematics 136) having as a prerequisite one semester of calculus or its equivalent. Students are encouraged to complete the calculus requirement in their first year.

The normal order of courses for a student majoring in economics is: Mathematics 125 and 126 (Calculus) and Economics 111 and 112 (Principles) during the first year; Economics 255 and 256 (Microeconomics and Macroeconomics) and Economics 249 (Statistics) during the second year; and anywhere from a minimum of four to a maximum of nine economics electives taken during the third and fourth years. At least three of the economics electives must be upper-level courses having as prerequisites Economics 255 (Microeconomics), Economics 256 (Macroeconomics), or both. These courses are numbered between 301 and 399 and are normally taken during the fourth year. For students interested in advanced study in economics, it is recommended that Mathematics 131 and 132 (Analysis) be substituted for Mathematics 125 and 126. Further, it is recommended that Economics 313 (Mathematics for Economists), Economics 314 (Econometrics), and additional courses in mathematics and computer science be taken.

## Departmental Honors Program

This program is usually limited to $4-6$ third-year and 4-6 fourth-year economics majors. Students apply for the program in the first semester of the third year and should complete Economics 249, 255 and 256 by the end of that semester to be eligible for the program. During the second semester of both the third and fourth years honors students participate in a methodology seminar; during the first semester of the fourth year the thesis is written under the direction of a faculty advisor. The honors course sequence is: Economics 460 (Research Methods 1) during spring of the third year; Economics 462 (Directed Research) during fall of the fourth year; and Economics 461 (Research Methods 2) during spring of the fourth year.

Economics 460 (Research Methodology 1) is a one-unit course that counts as the equivalent of a lower-level economics elective. Economics 461 (Research Methodology 2) is a half-unit overload which may be taken pass/no pass. Economics 462 (Directed Research) counts as the equivalent of an upperlevel economics elective. Students must meet the standards of the program in each course to receive the honors designation.

## The Economics Minor

The economics minor is designed to provide students with a coherently structured, substantive introduction to the discipline. The minor allows a student majoring in another field to add a strong foundation in economics, even if the interest in economics is not discovered until the second or third year. The minimum requirement for the minor is six semester courses in economics and a year of college calculus or its equivalent. The economics minor sequence is Economics 111 and 112 (Principles), Economics 255 (Microeconomics), Economics 249 (Statistics) or Economics 256 (Macroeconomics), and two economics electives. At least one elective must have Microeconomics or Macroeconomics as a prerequisite. Advanced placement credits in economics or statistics can satisfy specific course requirements, but may not be used towards fulfillment of the minimum total of six courses.

Students who have completed statistics in other departments are required to take Economics 256 (Macroeconomics). Students majoring in Economics-Accounting are not eligible for the economics minor. Courses taken on an audit or pass/no pass basis do not satisfy the requirements of the minor.

## The Economics-Accounting Major

Accounting is defined broadly as the process of identifying, measuring, and communicating economic information. Because sound decisions based on reliable information are essential for the efficient allocation of resources, accounting plays an important role in our economic system. Each year the largest accounting firms visit Holy Cross to recruit majors for employment opportunities in public accounting.

Although most majors choose to start their careers in public accounting, the curriculum is sufficiently broad to permit careers with government, private, and nonprofit institutions.

The economics-accounting major is designed to allow students the benefits of a liberal arts education while providing a core accounting curriculum for students interested in becoming certified public accountants. Educational requirements for professional certification vary by state, with many states requiring additional courses beyond the four-year bachelor's degree. Faculty advisors will help students develop a program to meet these requirements.

The number of students permitted to major or minor in economics-accounting is limited. Students may apply for the economics-accounting major during the admission process or subsequently in the fall of their first or second year.

Required courses in the major include financial accounting, intermediate accounting ( 2 semesters), nonprofit accounting, managerial and advanced accounting, income taxes, auditing, business law (2 semesters), statistics, principles of economics ( 2 semesters), and college calculus ( 2 semesters). Also required is a minimum of one and a maximum of three electives. The maximum number of courses in the department which may be taken by an economics-accounting major is 16 , unless advanced placement has been achieved in principles of economics or statistics. Advanced placement in economics or statistics may be used to satisfy those specific requirements for the economics-accounting major, in which case the allowed maximum number of courses in the department is reduced accordingly.

The normal order of courses for a student majoring in economics-accounting is: Mathematics 125 and 126 (Calculus), Economics-Accounting 181 (Financial Accounting) and Economics-Accounting 277 (Intermediate Accounting I) during the first year; Economics-Accounting 278 (Intermediate Accounting II), Economics-Accounting 270 (Governmental and Nonprofit Accounting) and Economics 111 (Principles of Macroeconomics) and Economics 112 (Principles of Microeconomics) during the second year; Economics-Accounting 282 (Auditing), 292 (Federal Income Taxes), Economics 249 (Statistics), and one elective in the third year; and Economics-Accounting 387 and 388 (Business Law), 389 (Managerial Accounting), 390 (Advanced Accounting) and additional electives during the fourth year.

## The Economics-Accounting Minor

Students interested in other major fields may consider pursuing a minor in economics-accounting. Minors must complete four required courses and three electives. The required courses include: Eco-nomics-Accounting 181 (Financial Accounting), Economics 111 and 112 (Principles of Economics), and Economics-Accounting 277 (Intermediate Accounting I). Electives include: Economics-Accounting 270 (Governmental and Nonprofit Accounting), Economics-Accounting 275 (Corporation Finance), Eco-nomics-Accounting 278 (Intermediate Financial Accounting II), Economics-Accounting 282 (Auditing), Economics-Accounting 292 (Federal Income Taxation), Economics-Accounting 389 (Managerial Accounting) and Economics-Accounting 390 (Advanced Accounting). First and second year students may apply for admission to the minor after completing financial accounting.

## Non-Majors

The Department strongly recommends that the full-year sequence of Principles of Economics be taken, especially if the student plans to take additional economics courses, all of which require the sequence as a prerequisite. Students may begin with either Economics 111 (Principles of Macroeconomics) or Economics 112 (Principles of Microeconomics). The student desiring only a one-semester overview of economics is advised to take Economics 111.

Non-majors seeking an introduction to accounting should take Economics-Accounting 181 (Financial Accounting).
Advanced Placement Credit: Students with advanced placement credit in economics receive placement in the curriculum. Students with a unit of AP credit in Microeconomics will forfeit that credit if they enroll in Economics 112, Principles of Microeconomics, and those with AP credit in Macroeconomics will forfeit that credit if they enroll in Economics 111, Principles of Macroeconomics. Students
with AP credit in Statistics will forfeit that credit if they enroll in Economics 249, Statistics. Economics majors with AP credit in economics must still complete a minimum of nine courses in the major. The maximum number of courses that may be taken by an Economics-Accounting major is reduced by each unit of AP credit.

## Courses

## Economics Courses

Economics 111, 112 - Principles of Economics
Annually
Develops principles which explain the operation of the economy and suggest alternative policy solutions to contemporary economic problems. Principles of Macroeconomics (fall) develops the principles of national income analysis, money, economic growth and international trade. Principles of Microeconomics (spring) covers principles governing commodity and resource pricing under different market conditions and the distribution of income. May be taken in either order. One unit each semester.

## Economics 221 - Economic Development of Modern China

Annually
Aims to provide the student with a sophisticated understanding of economic development in the People's Republic of China. The historical circumstances and resource endowments which have constrained Chinese economic development are examined as a basis for analyzing the intentions and success of policies adopted since 1949. Prerequisites: Economics 111, 112, or permission. One unit.

## Economics 222 - Health Economics

Annually
Applies microeconomic tools to study the expanding health care industry. Topics include the demand for health and medical care, health insurance markets, managed care organizations, physician supply decisions, hospital structures, government provision of health insurance, medical malpractice, and international comparisons of health care systems. Special emphasis is placed on ethical issues that arise in determining what choices society must make in the provision of health care. Prerequisites: Economics 111, 112. One unit.

## Economics 224 - Environmental Economics

Annually
Shows how natural resource usage and environmental issues can be analyzed from an economic perspective. Presents the basic concepts of environmental economics and develops the analytical and policy tools used in environmental economics. Considers the problems of air pollution, water pollution, and solid and hazardous waste management, their causes, and how they can be reduced. Other topics such as global warming, amendments to the Clean Air Act, and international environmental issues will be discussed. Prerequisites: Economics 111, 112. One unit.

## Economics 225 - Public Economics

Alternate years
Surveys theories of public expenditure and taxation and delves into specific topics such as health care, social insurance, education, tax reform, fiscal federalism, and deficit finance. Prerequisites: Economics 111, 112. One unit.

## Economics 229 - Economics of Sports

Annually
Applies economic tools to study the field of professional and collegiate sports. Topics include the organization of sports leagues, profit maximization by teams, the application of antitrust to sports, competitive balance, labor relations, gender and racial discrimination, the tension between academics and athletics at universities, and the economic impact of sports on local economies. Special emphasis is placed on the relationship between law and economics in sports and the regulation of leagues and athletes. Prerequisites: Economics 111, 112. One unit.
Economics 249 - Statistics
Fall, spring
An introduction to statistical methods emphasizing the statistical tools most frequently used in econom-
ic analysis. Topics include descriptive statistics, probability theory, random variables and their probability distributions, estimation, hypothesis testing, and linear regression analysis. Prerequisites: Economics 111 or 112. One unit.

## Economics 255 - Microeconomics

Fall, spring
Analyzes the economic behavior of households and firms and their interrelations within the market. Price and resource allocations in the following market structures are considered: pure competition, monopolistic competition, oligopoly, monopoly, and monopsony. The course concludes with a discussion of general equilibrium and its welfare implications. Prerequisites: Economics 111, 112; Mathematics 126 or 132 or 134 or 136 or equivalent. One unit.

## Economics 256 - Macroeconomics

Fall, spring
Studies aggregate economic behavior as determined by interactions among the product, financial, and labor markets. The variables focused upon are the general levels of prices, of national income, and of employment. Applications of the theory are made and policy inferences are drawn with respect to employment and price stability, growth and development, trade and the global economy. Prerequisites: Economics 111, 112; Mathematics 126 or 132 or 134 or 136 or equivalent. One unit.

## Economics 302 - Industrial Organization and Public Policy

Annually
Studies the theoretical and empirical relationships among market structure, conduct and performance in American industry. The knowledge gained is used to evaluate U.S. antitrust policy. A number of industry case studies and landmark court decisions are read. Prerequisite: Economics 255. One unit.

## Economics 303 - Economics of Human Resources

Annually
Analyzes the labor market in light of recent developments in economic theory. The following areas are explored: labor supply studies, human capital theory, and marginal productivity theory. Interference with the market through legislation, discrimination and labor unions and the interactions between the labor market and other sectors of the economy are considered. Prerequisite: Economics 255. One unit.

## Economics 304 - Law and Economics Annually

Examines the relative efficiency of alternative legal arrangements using microeconomics as the basic investigative tool. The core of the course consists of a thorough analysis of the common law. Special emphasis is given to the areas of property, contract, liability, and criminal law. Prerequisite: Economics 255. One unit.

## Economics 305 - Economic Growth and Development

Annually
Examines the theoretical and institutional factors influencing economic growth. Attention is given to various models of economic growth, the relationships among social, political and economic institutions and the pattern of economic growth, the optimal public policy mix for economic growth, and special problems of growth faced by the developing nations. Prerequisites: Economics 255, 256. One unit.

## Economics 307 - Theory of International Trade

Annually
Examines the causes and consequences of the trade of goods and services among nations. Attention is given to the principle of comparative advantage, the Ricardian model of trade, the factor endowments theory of trade, the specific factors model, new theories of trade, the causes and consequences of trade restrictions, economic growth and trade, international factor movements, and economic integration. Prerequisites: Economics 255. One unit.

## Economics 308 - International Monetary Theory and Policy

Alternate years Examines the financial and macroeconomic relations among nations. Attention is given to foreign exchange markets in the short run and in the long run, balance of payments accounting, interest rate adjustments and covered interest arbitrage, the choice of currency regimes, the international monetary sys-
tem, and multinational corporation risk management. Prerequisites: Economics 255, 256. One unit.

## Economics 309 - Comparative Economic Systems

Annually
The first segment develops an analytical framework for the comparison of economic systems. In the second segment this framework is used to examine and compare the economic systems of various countries including the United States, Germany, France, Japan, China, the former Soviet Union and other East European states. Prerequisites: Economics 255, 256. One unit.

## Economics 310 - Experimental Economics

Annually
This course emphasizes the interplay between theoretical models and laboratory observation in the development of microeconomics. Topics might include experimental methods, preference and choice, risk and uncertainty, expected utility maximization, game theory, industrial organization, search, bargaining, auctions, asset markets, asymmetric information, public goods, and voting. A number of classroom experiments are conducted. Prerequisites: Economics 249, 255. One and one-quarter units.

## Economics 312 - Monetary Theory

Annually
This course builds a model of the financial sector of the economy, uses it to gain an understanding of the workings of the financial system, and makes predictions of the effects of events on the financial system and economy as a whole. A particular emphasis is placed on understanding the workings of the Federal Reserve System and monetary policy. Thus, this course provides an understanding of the role and measurement of money; the theories of money demand and money supply; the workings of the banking system; interest rate determination; how prices of stocks, bonds, and other assets are determined; and the place the financial system has in the macroeconomy. Students cannot take both Economics 312 (Monetary Theory) and Economics 217 (Money and Banking). Prerequisites: Economics 255, 256. One unit.

## Economics 313 - Mathematics for Economists

Alternate years
The object of the course is to augment the mathematical backgrounds of students interested in pursuing a more quantitative approach to economics and business. Emphasis is on linear systems, matrix algebra, differential vector calculus, and optimization. Topics may also include game theory, integral calculus, and dynamic analysis. Mathematical methods are illustrated with various economic applications. Prerequisites: Economics 255 . One unit.

## Economics 314 - Econometrics

Annually
This course studies statistical methods used to estimate and test economic models. After a review of basic probability and statistics, the method of ordinary least squares regression is examined in detail. Topics include the Gauss-Markov theorem, inference, multicollinearity, specification error, functional forms, dummy variables, heteroskedasticity, and autocorrelation. Simultaneous equations and qualitative dependent variables may also be considered. A quantitative research paper is required. Prerequisites: Economics 249, 255. One unit.

## Economics 316 - Economics of Peace, Conflict, and Defense

Alternate years
Economic principles are applied to the study of international and regional conflicts and predator/prey relationships in an economy. Topics include war, conflict resolution, arms races, arms control, ethnic conflict, terrorism, the arms trade, defense industry issues, and attack/defense behavior in the economic realm. Prerequisite: Economics 255. One unit.

## Economics 320 - History of Economic Thought

Annually
This course surveys the thoughts and ideas of philosophers and economists throughout history who attempted to understand the workings of what we now call the economy. A long time span is covered, going briefly as far back as the ancient Greek writers, moving through the Scholastics, Mercantilists, and Physiocrats, but with a particular focus on the pivotal contributions of the Classical writers including Adam Smith, David Ricardo, and Karl Marx. Neoclassical thought is contrasted with institutional
and historical critics, leading to the great debate between capitalism and socialism. Changes in macroeconomic theory associated with John Maynard Keynes, the post-Keynesian views of macro, and the more modern formulation of microeconomics with its emphasis on econometric analysis round out the course. Prerequisites: Economics 255, 256. One unit.

## Economics 325 - Public Economics Alternate years

Surveys theories of public expenditure and taxation and delves into specific topics such as health care, social insurance, education, tax reform, fiscal federalism, and deficit finance. Prerequisites: Economics 111, 112. One unit.

## Economics 400 - Directed Readings in Economics

Annually
A program in reading and research in a specific topic open to majors with a minimum GPA of 3.25 . Permission of the instructor is required. One unit.

## Economics 460 - Research Methodology Seminar 1

This is a department honors seminar that examines the methodology used by economists. Students learn what the economist does by examining specific economic studies. The steps involved in undertaking research and alternative methodological approaches are treated. A high level of student participation is expected. By the end of the seminar the students settle upon topics that they will research in the fourth year and write a prospectus. The course counts toward the major as the equivalent of a lower-level economics elective. One unit.

Economics 461 - Research Methodology Seminar 2
Spring
This is the same as Economics 460. Fourth-year honors students participate for a second time in the seminar by presenting their completed research projects and by serving as resource persons for other honors students. Prerequisites: Economics 460, 462. One-half unit.
Economics 462 - Honors Directed Research
Fall
Honors students undertake a research project under the direction of a department faculty member. The results are presented in the form of a thesis. The course counts toward the major as the equivalent of an upper-level economics elective. Prerequisite: Economics 460 . One unit.

## Economics-Accounting Courses

Economics-Accounting 181 — Financial Accounting
Fall, spring
Introduces the student to the fundamentals of the accounting process. Presents an overview of the accounting cycle, leading to preparation of basic financial statements including the income statement and balance sheet. Examines the proper accounting treatment of the major assets of merchandising and service companies including cash, accounts receivable, inventory, property, plant and equipment. Also includes an examination of economic activity related to liabilities and stockholders' equity. Introduces the cash flow statement and basic financial statement analysis. One section in the fall semester is reserved for first year majors. One unit.
Economics-Accounting 270 — Governmental and Nonprofit Accounting
Annually
This course studies accounting and management issues pertinent to state and local government, voluntary health and welfare organizations, other nonprofit organizations, colleges and universities, and private nonprofit hospitals. Prerequisites: Economics-Accounting 181. One unit.

## Economics-Accounting 275 - Corporation Finance

Annually
Topics include management of assets, tax factors in business decisions, the various sources of capital, both short- and long-term financing with debt versus equity, the roles of the investment banker and the securities exchange, the expansion and growth of business firms, and the treatment of financially distressed business firms. Prerequisites: Economics 111, 112. One unit.

This course offers a thorough study of the proper valuation of assets, liabilities, and stockholders' equity, and the related problems of the proper matching of revenues and expenses. Emphasis is given to the preparation, analysis and interpretation of financial statements. The spring semester includes a half-unit computer lab. Prerequisites: Economics-Accounting 181. One unit.

## Economics-Accounting 282 — Auditing

Spring
Considers the theory and practice of auditing, including professional ethics, professional standards and procedures, and the legal environment in which the auditor functions. Emphasis is placed on the audit process as students gain an understanding of how to plan, design and execute an audit. Other topics include internal control, the nature of evidential matter and the auditor's reporting responsibilities. Prerequisites: Economics-Accounting 277. One unit.
Economics-Accounting 292 — Federal Income Taxation
Fall
A study of the federal income tax laws as they relate to individuals, partnerships, and corporations, with special emphasis on tax planning. Consideration is also given to the history of the federal income tax, various proposals for tax reform, and the use of tax policy to achieve economic and social objectives. Prerequisites: Economics-Accounting 277. One unit.
Economics-Accounting 387, 388 — Business Law
Annually
(Based on the Uniform Commercial Code) Required of all students majoring in accounting. Includes contracts, agency, sales, negotiable instruments, the legal aspect of business associations, insurance and property, both real and personal. Prerequisites: Economics-Accounting 181. One unit each semester.

## Economics-Accounting 389 - Managerial Accounting

Fall
An introductory study of cost systems, activity-based management, and management evaluation systems. The emphasis is on managerial control through the use of accounting data. Prerequisites: EconomicsAccounting 277. One unit.
Economics-Accounting 390 - Advanced Accounting
Covers advanced problems relating to partnership formation, operation, and liquidation; a study of corporate business combinations and consolidated financial statements under the pooling and purchase accounting concepts; and other accounting topics such as installment sales, consignments, branch accounting, bankruptcy and corporate reorganizations. Prerequisites: Economics-Accounting 277. One unit.

## Education

Ricardo Dobles, Ed.D., M.Ed., Assistant Professor
Ericka J. Fisher, Ed.D., Assistant Professor
Denis J. Cleary, M.A.T., Lecturer
Mary M. Wellman, Ph.D., Lecturer
David J. Lizotte, Cand. Ph.D., Director of the Teacher Education Program and Lecturer
Thomas F. Gibbons, M.Ed., Facilitator of the Pre-practica and Practica, Burncoat High School
The Department of Education offers courses in education intended for two purposes: to introduce students to a range of ideas foundational to the study of education in general; and, to introduce students to the theories, issues, and methods of secondary education specifically.

## Courses

Education 120 - Education for Social and Political Change
Spring
This class explores the inter-related themes of oppression, privilege, and resistance as they pertain to the educational experiences of marginalized communities in the United States and other parts of the world. One unit.

Education 122 - First Pre-Practicum - Teaching
Fall, spring
A 40-hour, on-site period of observation and work in the public school. No units.

## Education 124 - Second Pre-Practicum - Teaching <br> Fall, spring

A 40-hour, on-site period of observation and work in the public school. No units.
Education 167 - Educational Psychology
Fall, spring
The student is introduced to relationships existing between psychology and education. Growth and development, the nature of the learner, measurement and evaluation, motivation, the teaching-learning process, and the role of the teacher are studied. New and innovative approaches to education will be discussed. One unit.
Education 168 - Philosophy of Education
Fall
Designed as an introduction to educational theories. The range of concern includes: education in nature and society, education in the school, education in the United States, and ultimate questions in the theory and practice of education. One unit.
Education 169 - Schooling in the United States
Fall, spring
This course is an introduction to the problems and possibilities of public schooling in the United States. This introductory course will allow students to examine some ideas about the history of and politics involved in public schools and to consider questions of educational philosophy and curriculum. The goal is to involve students in thinking about what educational institutions should do, who should be educated and how to decide who should teach. Students will consider the purpose of education and the connection of schools to society. One unit.

Education 175 - Principles and Methods of Teaching
Spring
The student will study and demonstrate various teaching methods. Questions concerning the secondary school curriculum, discipline and motivation, instructional materials and secondary school goals and principles are also pursued. Methodological and curriculum questions specific to the discipline will be illustrated and discussed. One unit.

Education 181 - The Middle School
Spring
This course is limited to those in the Teacher Education Program. When taken with the rest of the program, it leads to Massachusetts license as a middle school teacher. The middle school student, curriculum and other issues are covered. One unit.

Education 200 - Special Topics in Education:
Fall, spring
Innovations and Current Controversies in Education. One unit.

## Education 202 - Tutorial

Fall, spring
Tutorial and research projects designed by students and faculty members. Admission determined by evaluation of proposal. One unit.
Education 273 - Urban Education Fall
This class focuses on education in large urban contexts, with particular emphases on poor and minority education. Participants will address a range of factors that create the conditions for teaching and learning in city schools. One unit.

## Education 320 - Practicum - Secondary School Teaching

Fall, spring
A full-time practicum experience of supervised teaching in the high school. Three units.
Education 330 - Seminar in Teaching
Fall, spring
A seminar to accompany Education 320, Practicum, Secondary School Teaching. It will cover issues arising in the practicum experience, as well as special needs education, multiculturalism, the adolescent and other topics. One unit.

## Teacher Education Program

## David J. Lizotte, Cand. Ph.D., Director and Lecturer

Professional Liaison: Thomas F. Gibbons M.Ed., Burncoat Senior High School
Assistant Adjunct Lecturers: Thomas G. Bostock, Burncoat High School; Louis Lebel, Burncoat High School; Diane Cummings, Burncoat High School; Mary Doyle, Burncoat High School.
Cooperating Practitioners from Burncoat High School: Raymonde Bergeron, Kim Capobianco, Dianne Cummings, Thomas Davis, Katherine Despres, Mary Doyle, Ian Griffin, Christine Guillette, Lynn Hernrion, James Kett, Carlos Lugo, Antonia Mariano, Mary Murphy, Ann Reitzell.Cooperating Practitioners from Burncoat Middle School: Michelle Fournier, Phil King, Nancy Lessard, Fernando Nanni.

In addition to providing an opportunity for all students to be introduced to the theories and methods of education, students majoring in Biology, Chemistry, English, French, History, Latin, Mathematics, Physics, Spanish or Visual Arts may prepare to become state licensed teachers of those subjects. Students majoring in Religion may prepare to become a religion teacher in a program not leading to a license. To undertake the program students should begin by taking Educational Psychology no later than their second year. During first or second year, students make written application to the program.

To receive certification in Massachusetts students must pass the MTEL (Massachusetts Test for Educator Licensure). There was a 100 percent pass rate on the literacy and communication section, a 90 percent pass rate on the subject section, and a summary pass rate of 90 percent on the MTEL for students in the graduating class of 2004 who completed the Teacher Education Program at Holy Cross.

## Courses Toward Licensure

Education 122 - First Pre-Practicum - Teaching
Fall, spring
Education 124 - Second Pre-Practicum - Teaching
Fall, spring
Education 167 - Educational Psychology
Fall, spring
Education 168 - Philosophy of Education
Fall
Education 175 - Principles and Methods of Teaching Spring
Education 181 - The Middle School
Education 320 - Practicum - Secondary School Teaching Spring

Education 330 - Seminar in Teaching
Fall, spring
Fall, spring

## English

Patricia L. Bizzell, Ph.D., Professor
Robert K. Cording, Ph.D., Professor, James N. and Sarah L. O'Reilly Barrett Professor in Creative Writing
Maurice A. Géracht, Ph.D., Professor, Stephen J. Prior Professor of Humanities
Bill Roorbach, M.F.A., Visiting Professor, William H.P. Jenks Chair in Contemporary American Letters
Richard E. Matlak, Ph.D., Professor
Eve Shelnutt, M.F.A., Professor
Patrick J. Ireland, Ph.D., Associate Professor
James M. Kee, Ph.D., Associate Professor and Chair
Sarah Luria, Ph.D., Associate Professor
Shawn Lisa Maurer, Ph.D., Associate Professor
James J. Miracky, S.J., Ph.D., Associate Professor
William R. Morse, Ph.D., Associate Professor and Associate Dean
Lee Oser, Ph.D., Associate Professor
Sarah Stanbury, Ph.D., Associate Professor
Susan Elizabeth Sweeney, Ph.D., Associate Professor
Helen M. Whall, Ph.D., Associate Professor
John H. Wilson, Ph.D., Associate Professor
Christine A. Coch, Ph.D., Assistant Professor
Diana V. Cruz, Ph.D., Assistant Professor
Jonathan D. Mulrooney, Ph.D., Assistant Professor
Leila S. Philip, M.F.A., Assistant Professor
Paige Reynolds, Ph.D., Assistant Professor
Jasna R. Shannon, Ph.D., Director of Writing Programs and Lecturer
Christopher Jane Corkery, B.A., Visiting Instructor
George F. Grattan, Cand. Ph.D., Visiting Instructor
The study of English is fundamental to a liberal education. It deals not only with literary works of the imagination-poems, plays, novels, short stories, non-fiction-but also with the use of language as a means of communication. The English Department offers the student the opportunity to develop an appreciation of literature and a sensitivity to literary techniques and language and to increase mastery of written expression. Courses in the department help students to become better readers, writers, and speakers, and thus have the added benefit of preparing students for graduate study in law, medicine, business, education and other professional fields that value effective communication.

English majors take 10 literature or writing courses above the first-year level. First-year majors will be enrolled in Critical Reading and Writing-Poetry (CRAW) designated for majors. Students who declare English their major any time after their first semester must take Critical Reading and Writing-Poetry (English 120) as a prerequisite to further pursuit of the major. All English majors are required to take four out of seven literary periods: Medieval, Renaissance, 18th-century British, 19th-century British, 19th-century American, 20th-century British, and 20th-century American. At least two of the four periods must be before 1800. Also, two of the four courses must be sophomore-level Readings courses. The other two period requirements may be satisfied by any upper-division course in the period, including single-author courses. The purpose of these requirements is: (1) to provide a formal grounding in the many forms literature has taken over time; (2) to introduce the student to the cultural and historical issues that shape literary responses to their times; and (3) to continue with development of close reading and analytical writing skills begun in the first-year courses in Critical Reading and Writing.

The remaining six courses required for the major can come from any of the upper-division courses listed below, including courses that are approved for Study Abroad and tutorials and honors theses devoted to British or American literature.

The department recommends that majors take their 200-level period Readings requirements before

300 -level courses and advanced seminars. Ideally, they will be completed by the end of the second year. If the student intends to study abroad in a non-English speaking country in the junior year, it is particularly important that the Readings courses be completed in the sophomore year. If the student is in the Teacher Certification Program, which requires a full semester of the senior year, it is also necessary to take all of the requirements for the major by the end of the first term of the senior year.

Each semester the English Department offers approximately 25 upper-division courses for majors. Some are organized in terms of historical periods of English and American literature (Restoration and 18th-century Drama, Early American Literature, African-American Literature); some are organized according to literary type (Modern Drama, 19th-Century Novel); and some are by author (Chaucer, Shakespeare); others are arranged thematically (Tragic View, Southern Literature); some deal with aesthetics and criticism (Feminist Literary Theory); and others concentrate upon the art of writing (Composition, Creative Writing: Poetry, Fiction, Non-fiction, and Expository Writing).

Students have the opportunity to pursue a Creative Writing Concentration within the English major. The program allows students to specialize in poetry, fiction, or non-fictional prose. In order to complete the requirements of the Concentration, students take a total of, and no more than, 12 English courses beyond CRAW: the four period courses (two of which are Readings courses) taken by all majors; four additional upper-level literature electives; and four creative writing courses. Concentrators take introductory writing courses in two genres; they then specialize in one of the genres, taking intermediate and advanced courses. Interested students should begin the concentration by taking one of the introductory courses during the sophomore year or, at the latest, during first semester of the junior year. Those who wish to complete the requirements for the program should proceed to take an introductory course in a second genre and then intermediate and advanced courses in their genre of choice. At each stage in the process, students need approval from the faculty in the program to continue. Those who actually complete the four-course sequence as well as the other requirements for the English major will be certified as having completed the Concentration.

The English Department Honors Program is designed for selected members of the senior class who have demonstrated excellence and an aptitude for independent research in their studies of English or American literature. Candidates for honors in English, who are admitted to the program in their junior year, must take a course in literary theory and a seminar, in addition to writing a two-semester senior English honors thesis. Admission to honors is by invited application to the English Honors Committee in the junior year. Students may be members of both the College Honors Program and the English Honors Program. Such students need write only one English thesis for both programs.

Tutorials, seminars, and lecture courses on special topics are also offered, as well as a range of courses cross-listed with the College's concentrations in Women's Studies, African-American Studies, Peace and Conflict Studies, and International Studies.

The Nu Chi chapter of Sigma Tau Delta, the national English honor society, was established in 1987. Eligible English majors are elected to membership and actively engage in the promotion of English studies.
Advanced Placement Credit: Students with AP credit in English are not awarded credit in the major or advanced placement in the English curriculum.

## Courses

## Introductory Courses

## English 110 - Composition

Fall, spring
Devoted to improving the student's writing through frequent revisions. Intensive work during the semester concentrates on the student's own writing, which is examined in class and in conference with the instructor. Class size limited to 12 students. One unit.

English 120 - Critical Reading and Writing: Poetry
Fall, spring
Identifies and examines prosodic and figurative elements of poetry as well as the historical context of poems of various periods, authors, and kinds. Equal emphasis falls on the student's production of critical essays, which logically organize and persuasively present responses to the poems from a close reading. Required of all English majors. One unit.
English 121 - Critical Reading and Writing: Fiction
Fall, spring
The topics are the elements of fiction: narrative structures, various aspects of style, and point of view. This course is also devoted to the writing of student essays on the literature. One unit.

## English 122 - Critical Reading and Writing: Drama

Fall, spring
This course studies carefully dramas from the Western tradition selected because they clearly reflect both the elements of drama and the nature of genre. Professors emphasize the critical analysis of each text rather than performance of them, though each class will attempt to attend at least one production. Students will be asked to write a series of essays which demonstrate their growing ability to write wellorganized analytic/argumentative essays. One unit.

## English 123 - Critical Reading and Writing: Non-fiction

Fall, spring
This course examines the genres of literary non-fiction, including literary journalism, the personal essay, and the memoir. Among the literary techniques examined are aspects of style, narrative structure, and narrative voice. Equal emphasis falls on the student's production of critical essays, which logically organize and persuasively present responses to the texts from a close reading. One unit.

## English 141 - Introduction to Creative Writing/Poetry

Annually
This is an introductory course in the study of the form and technique of poetry. As readers of literature we study how a work of art and an artist's vision is pieced together; as aspiring writers of literature we come to have a hands-on understanding of how a poem is created. Emphasis is on the intensive reading of modern and contemporary poems, though the assignments are creative. Class size limited to 12 students. One unit.

## English 142 - Introduction to Creative Writing/Fiction

Annually
This is an introductory course in the study of the form and technique of fiction. Emphasis is on the intensive reading and writing of short stories. Lectures of form, language and finding material for fiction. Class size limited to 12 students. One unit.

## English 143 - Introduction to Creative Writing/Non-Fiction <br> Annually

This is an introductory course in the study of the essay. Emphasis is on the intensive reading of professional writers of the essay and its wide range of forms, from the personal essay to the more investigative essay. Writing assignments are creative. Class size limited to 12 students. One unit.

## Upper-Division Courses

| English 200 — Masterpieces of British Literature | Fall, spring |
| :--- | :---: |
| A study of selected major works of British Literature. Non-majors only. One unit. |  |
| English 201 — Masterpieces of American Literature | Fall, spring |
| A study of selected major works of American Literature. Non-majors only. One unit. |  |
| English 241 — Intermediate Creative Writing/Poetry | Annually |

For students who have taken Introduction to Poetry. A more advanced course on the reading and writ-
ing of poems with emphasis on prosody, writing in closed and open forms, and writing various types of poems. Lecture and workshop format with more attention to student writing. Class size limited to 12 . Permission by instructor required. One unit.

## English 242 - Intermediate Creative Writing/Fiction

Annually
For students who have taken Introduction to Fiction. A more advanced course on the reading and writing of the short story with emphasis on refining the skills learned in the introductory course. Workshop format with lectures and readings. Class size limited to 12 . Permission by instructor required. One unit.

## English 243 - Intermediate Creative Writing/Non-Fiction <br> Annually

For students who have taken Introduction to Non-fiction. A more advanced course on the reading and writing of essays with emphasis on the structural composition of longer, more investigative pieces. Class size limited to 12 . Permission by instructor required. Class size limited to 12 . Permission by instructor required. One unit.

English 290 - Readings in Medieval Literature
Fall and/or spring
Covers the major genres of medieval Continental and English literature, beginning with the early epic tradition and proceeding to the great religious and secular texts of the 12th through 14th centuries. One unit.

## English 291 - Readings in Renaissance Literature <br> Fall and/or spring

Covers significant texts from representative genres of the 16th and 17th centuries: philosophical dialogue, pastoral, lyric, literary criticism, tragedy, epic, and essay. One unit.

## English 292 - Readings in 18th-Century Literature

Fall and/or spring
Covers the variety of literature from 1660 to the end of the 18th century, with a focus on the major genres of drama, lyric poetry, the novel, and prose satire in social, political, religious, philosophical, and aesthetic contexts. One unit.
English 293 - Readings in 19th-Century American Literature Fall and/or spring Covers poetry, prose essays, short stories, and novels that reflect the scope of this century's engagement with issues of race, gender, Transcendentalism, science and technology, and the Civil War and its aftermath. One unit.

English 294 - Readings in 19th-Century British Literature
Fall and/or spring Covers the major poetry, drama, fiction, and prose of the Romantic and Victorian periods in the religious, political, scientific, and aesthetic contexts of a century of revolutions that shook the foundations of Western Civilization. One unit.
English 295 - Readings in 20th-Century American Literature
Fall and/or spring
A study of the major genres of the 20th century in the context of literary and cultural developments. One unit.

English 296 - Readings in 20th-Century British Literature
Fall and/or spring
Covers the poetry, short story, drama, essay, and novels of 20th-century England and Ireland, especially as responses to industrialism, imperialism, urbanization, war, and changing paradigms of the self. One unit.

## English 305 - Expository Writing

Annually
Intensive reading and writing of expository essays to develop the student's authorial voice and style. Students for whom English is a second language or who come from a diverse or multicultural background will receive special help in some sections; consult the instructor. Permission of instructor required. Class size limited to 12 . One unit.
include Chaucer's Troilus and Criseyde, Piers Plowman, and a selection of romances, lyrics, and other 13th- and 14th-century texts. One unit.

## English 314 - Chaucer

Annually
A reading and critical discussion of the complete Middle English text of The Canterbury Tales and selected minor poems. One unit.

English 320 - 16th-Century Renaissance Literature Alternate years A study of 16th-century prose and poetry in Europe and England. Included are works of Petrarch, Castiglione, More, Wyatt, Sydney, and Spenser. One unit.

English 321 - 17th-Century Renaissance Literature
Every third year
Concentrates primarily on the poetry of the period, including works of Jonson, Donne, Herrick, Carew, Herbert, Vaughan, Marvell, and Milton. One unit.
English 323 - Ovid in the Renaissance
Every third year
A study of Ovid's Latin epic, the Metamorphoses, and its influence upon English Renaissance works by Shakespeare, Spenser, Marlowe, and Milton. One unit.

## English 324 - Milton

Every third year
A study of Milton's early poems, Paradise Lost, Paradise Regained, and Samson Agonistes, and selections from the prose. One unit.

English 327 - Shakespeare's Predecessors
Alternate years
This course will examine representative plays from the "native tradition" of Medieval England (in translation) as well as those plays which were popular on the early modern stage when Shakespeare first began his career. One unit.

## English 328 - Shakespeare's Contemporaries

Alternate years
In this course we will look at playwrights who are often dwarfed by Shakespeare, but who legitimately competed with him for that greatness. Other topics will include early modern notions of rivalry and collaboration, as well as the increasing tension between governing authorities and the theatre. One unit.
English 329 - Shakespeare
Fall, spring
A one-semester survey of the major works of Shakespeare, focusing on individual texts as representative of the stages in his dramatic development, with some discussion of Shakespearean stage techniques. One section each for majors and non-majors. One unit.
English 336 - 18th-Century Novel
Every third year
A close examination of the novel as formal prose narrative. Novels by Defoe, Fielding, Richardson, Smollet, the Gothic novelists, Sterne, and Austen are considered in detail with collateral readings. One unit.

## English 337 - 18th-Century Poetry

Every third year
This course attends to the development of 18th-century English poetry from the canonical Augustans, Dryden, Pope, Swift, Anne Finch and Lady Montagu through the mid-century and later work of Gray, Collins, the Wartons, Smart, Cowper, Charlotte Smith, Joanna Baillie and Anna Seward, ending with Blake's lyrics. One unit.

## English 339 - Restoration and 18th-Century Drama

Alternate years
A survey of English drama from Dryden to Sheridan, including heroic drama, Restoration comedy, sentimental developments of the 18th century, and the re-emergence of laughing comedy. One unit.
English 341 - Advanced Creative Writing/Poetry
Annually
For students who have taken Introduction and Intermediate Poetry. This is a capstone course with concentration on reading essays by professional poets on the craft of poetry and on developing a student portfolio of poetry. Workshop format. Class size limited to 12 . Permission by instructor required. One unit.
English 342 - Advanced Creative Writing/Fiction
Annually
For students who have taken Introduction and Intermediate Fiction. This is a capstone course with
concentration of developing a student portfolio of short stories. Workshop format. Class size limited to 12 students. Permission by instructor required. One unit.
English 343 - Advanced Creative Writing/Non-Fiction
Annually
For students who have taken Introduction and Intermediate Non-Fiction. This is a capstone course with concentration on developing a student portfolio on non-fiction pieces. Workshop format. Class size limited to 12 . Permission by instructor required. One unit.

## English 344 - The Romantic Revolution

Alternate years
A study of the major writers of the Romantic movement-Edmund Burke, Mary Wollstonecraft, William Wordsworth, Dorothy Wordswroth, Coleridge, Mary Shelley, Percy Bysshe Shelley, Byron, Keats, Hazlitt, Lamb, and DeQuincey. One unit.
English 345 - British Women Writers: 1780-1860
Every third year
Novels, poetry, and prose writings by women writing during and after the Romantic Movement-Frances Burney, Jane Austen, the Brontes, Mary Wollstonecraft, Elizabeth Barrett Browning, and others. One unit.
English 347 - 19th-Century Novel
Every third year
A close examination of the British novel in the 19th century, including novels by Thackeray, Dickens, the Brontes, George Eliot, and Hardy. One unit.

English 350 - Early American Literature
Every third year
A study of the development of cultural contact between Native Americans and Europeans, the Puritan experiment, and the founding of the nation from 1600-1830. One unit.

English 351 - American Renaissance
Alternate years
A study of the American Renaissance through selected prose and poetry of Poe, Emerson, Thoreau, Whitman, Hawthorne, and Melville. One unit.

English 352 - American Realism
Alternate years
A study of the rise of variant expressions of realism, its evolution into naturalism, the revival of local color and the flowering of regionalism, all in response to the changing American scene through immigration, segregation, business, technology and other forces between the Civil War and World War I. One unit.
English 353 - 19th-Century American Women Writers
Every third year
This course studies various genres in which 19th-century women engaged restrictive definitions of woman's sphere. Authors treated may include Davis, Child, Stowe, Alcott, Dickinson, Phelps, and Wharton. One unit.
English 354 - Civil War \& Reconstruction Literature
Every third year
A survey of how the Civil War and Reconstruction periods have been described in American literature, from both the northern and southern perspective. Possible works include selected Civil War poetry and speeches, Stephen Crane's Red Badge of Courage, Margaret Mitchell's Gone with the Wind, and Charles Frazier's Cold Mountain. One unit.
English 357 - Modern American Poetry
Every third year
A close analysis of the development of American poetry from the early 20th century up to the contemporary period, including such poets as Pound, Eliot, Williams, Crane, Frost, Stevens, Bishop, and others. One unit.
English 358 - Modern American Novel
Every third year
A study of the emergence of Modernism and other currents in the American novel from 1900 to the contemporary period. One unit.
English 359 - Southern Literature
Every third year
A study of the writers of the so-called Southern Renaissance that began in the 1920's because of Old and

New South tensions, including such figures as Faulkner, Penn Warren, Welty, Tate, Ransom, Styron, Flannery O'Connor, and Tennessee Williams. One unit.

## English 361 - Modernism and the Irish Literary Revival

Every third year
A study of the relationship between international modernism and the cultural nationalism of the Irish Literary Revival. Authors treated include Oscar Wilde, G. B. Shaw, W. B. Yeats, Lady Augusta Gregory, James Joyce, Sean O'Casey, Elizabeth Bowen, Samuel Beckett, and Liam O'Flaherty, among others. One unit.

## English 362 - T. S. Eliot

Every third year
A close study of Eliot's poetry, criticism, and drama, including unpublished and lesser-known writings. One unit.

## English 363 - Joyce

Every third year
A close study of Joyce's modernist epic novel Ulysses as an experimental narrative; preceded by a close reading of A Portrait of the Artist as a Young Man or Dubliners. One unit.

## English 364 - Contemporary Irish Literature

Alternate years
This course focuses on the prose, poetry, and drama produced in Northern Ireland and the Republic from the last quarter of the 20th century to the present. Writers studied include Boland, Doyle, Friel, Heaney, and Ni Dhomhnaill as well as those less familiar to American readers, and readings are explored in light of relevant contemporary cultural concerns such as sectarianism, gender, the Celtic Tiger, and post-colonial identity. One unit.

## English 365 - Modern British Poetry

Every third year
A study of the major British poets in the 20th century, including Hardy, the Georgians, the Imagists, Lawrence, Yeats, Eliot, Auden, and Dylan Thomas. One unit.

English 366 - Modern British Novel
Alternate years
A study of developments in the British novel from 1900-1950, with an emphasis on Modernist texts, through an examination of works by novelists such as Forster, Joyce, Woolf, Lawrence, Rhys, Greene, and Waugh. One unit.

## English 367 - American Women Writers

Every third year
A study of the history of female authorship in America, emphasizing the ways in which individual women circumvented cultural proscriptions against female reading and writing, and manipulated existing literary genres in order to make their voices heard. One unit.

## English 368 - African-American Literature

Alternate years
A survey of representative American Black literature from slave narratives to contemporary writing, with a thematic emphasis, such as the continuing impact of slavery on African-American experience. One unit.

## English 369 - Modern Drama

Every third year
A study of developments in drama from 1890 to 1960 in England, America, and on the Continent through an examination of selected works of such playwrights as Ibsen, Chekhov, Shaw, Pirandello, O'Neill, Brecht, Williams, and Beckett. One unit.
English 370 - Tragic View
Every third year
A study of the theory of tragedy in dramatic and nondramatic literature. Readings in Greek tragedians, Latin and Continental, as well as English and American literature. One unit.

English 371 - Detective Fiction
Alternate years
The course traces detective fiction from its 19th-century beginnings (Poe, Doyle) to the British Golden Age (Christie, Sayers), and recent metaphysical parodies of the genre (Pynchon, Auster). One unit.

English 372 - Contemporary African-American Literature and Culture
Alternate years
An examination of post-civil rights movement novels, poetry, nonfiction, art, film, and music from the perspective of Trey Ellis' "New Black Aesthetic." Compares Spike Lee, Jean-Michel Basquiat, Lisa Jones,

Paul Beatty, Living Colour, and Terry McMillan to previous literary and political movements in AfricanAmerican culture. One unit.

## English 374 - The Bible and Literature

Alternate years
The course takes its title from Northrop Frye's book, The Great Code. The course studies what Frye calls the "mythological universe" of the Bible that stretches from creation to the end of the world, looking particularly at the narrative structures of the Bible and its recurrent patterns of imagery. One unit.

## English 375 - Asian American Literature

Alternate years
A survey of representative Asian American literature from early twentieth century immigrant narratives to contemporary writings. This course examines Asian American literary production and its main literary themes. One unit.

## English 376 - Postmodern British Novel

Every third year
A study of the rise and development of the "postmodern" novel in Britain from the late 1960's to the present, including works by Rhys, Fowles, Lodge, Rushdie, Weldon, Winterson, Amis, and Barnes. Topics to be discussed include: postmodernism, historicity, postcolonialism, pop culture, and constructions of race/gender/sexuality. One unit.

## English 379 - Contemporary Drama

Every third year
A study of developments in Anglo-American drama from 1960 to the present through the work of playwrights such as Beckett, Shepard, Mamet, Wasserstein, Norman, Hare, Churchill, Wilson, Fugard, Shange, and Kushner. One unit.

## English 380 - Representing the Law in Drama

Alternate years
This course studies drama from various epochs and genres, inquiring how legal systems shape plays centered on questions of justice and how drama itself critiques different systems of law. One unit.

## English 381 - Rhetoric

Alternate years
A consideration of rhetorical theory in the classical texts of Plato and Aristotle, an analysis of some famous examples of persuasive eloquence, and the student's own exercise of persuasive speech on subjects of public concern. One unit.

## English 382 - Queer Theory

Every third year
A continuously evolving offshoot of Gender Studies inspired by the work of Foucault, Sedgwick, Butler, and others, Queer Theory is explored in this course to determine the degree to which it approximates an authentic discipline generative of productive insights by examining diverse but conventionally understood works of the canon in more heterodox ways. One unit.

## English 383 - Feminist Literary Theory

Annually
Readings in major directions in 20th-century feminist literary theory, with study of works by writers such as Charlotte Bronte, Chopin, Gilman, Woolf, Atwood, and Morrison. Theory may address such issues as gendered reading and writing, representation of the body and sexuality, gender $/ \mathrm{race} / \mathrm{class}$, feminism and ideology. One unit.

## English 384 - Literary Theory <br> Alternate years

A study of the aims and procedures of literary criticism and of representative approaches, both ancient and modern. Selected readings from influential critics from Plato and Aristotle to the late 20th century, with application to literary works. One unit.

## English 385 - Contemporary Literary Theory

Alternate years
The course introduces students to some of the major positions in modern and contemporary literary criticism: the "old" and "new" historicisms, formalism, reader-response criticism, structuralism, hermeneutics, deconstruction, critique of ideology, and cultural studies. Seeks to clarify literary criticism's place among the contemporary disciplines. One unit.

## English 386 - Advanced Creative Writing/Pedagogy

Annually
Instruction in teaching creative writing in the public schools, enhancing credentials. Seven hours per week practicum open to English and Education majors. Permission of instructor. Class size limited to 12. One
unit.
English 387 - Composition Theory and Pedagogy
Annually
This course investigates how people learn to write, and how they can be helped to write better. Topics include individual composing processes, academic discourse constraints, and cultural influences on writing. This by-permission course is required for all students who wish to become peer tutors in the Holy Cross Writer's Workshop. One unit.

## English 390 - Special Topics in English

Fall, spring
The study of a special problem or topic in literature or language, or a body of literature outside present course listings. Representative examples include: Renaissance Love Lyric, Arthurian Tradition, Contemporary Women Writers, Renaissance Women Writers, 19th-century Novel \& Crime, Frost/Stevens. One unit.
Advanced Courses
English 400 - Tutorials and Independent Study Projects
Fall, spring Permission of the instructor and/or the department chair ordinarily required for such courses. One unit.

## English 401-405 - Seminars

Annually
Advanced seminars are classes with prerequisites that offer the student an opportunity to pursue an ambitious independent project and to take more responsibility for class experience. Some recent advanced courses have been: Book as Text/Object, Keats and Wordsworth, Medieval East Anglia, Austen: Fiction to Film, Shakespeare's Romances, Literary Constructions of Romantic Love, Forgotten Language: The Art of Nature Writing, and Slavery \& the Literary Imagination, Shakespeare's Comedies. One unit.

## English 406 - Seminar: Research Methods

Annually
This course is designed to support advanced research and writing skills for students engaged in Englishrelated thesis or capstone projects. One unit.
English 407, 408 - English Honors Thesis
Annually
Two semesters credit, granted at end of second semester. Candidates selected from invited applicants to the English Honors Committee. One unit each semester.

## History

Lorraine C. Attreed, Ph.D., Professor
Ross W. Beales Jr., Ph.D., Professor
Anthony J. Kuzniewski, S.J., Ph.D., Professor
Theresa M. McBride, Ph.D., Professor
David J. O'Brien, Ph.D., Loyola Professor of Roman Catholic Studies
Karen L. Turner, Ph.D., Professor, Rev. John E. Brooks, S.J., Professorship in the Humanities
Noel D. Cary, Ph.D., Associate Professor
Vincent A. Lapomarda, S.J., S.T.L., Ph.D., Associate Professor
Aldo A. Lauria-Santiago, Ph.D., Associate Professor
Mark E. Lincicome, Ph.D., Associate Professor and Chair
Edward T. O’Donnell, Ph.D., Associate Professor
Michael R. West, Ph.D., Associate Professor
Thomas W. Worcester, S.J., Ph.D., Associate Professor
Sahar Bazzaz, Ph.D., Assistant Professor
Mary A. Conley, Ph.D., Assistant Professor
Cynthia V. Hooper, Ph.D., Assistant Professor
Gwenn A. Miller, Ph.D., Assistant Professor
Stephanie E. Yuhl, Ph.D., Assistant Professor
James K. Bidwell, Ph.D., Lecturer
Charles R. Gallagher, S.J., Ph.D., Lecturer
The History Department offers a wide range of courses dealing with most of the world's major civilizations. The department offers four levels of courses: (1) for those beginning a serious study of history, the Department has designed entry-level courses, History 101 through History 199. 100-level courses are broad surveys and topical introductions to the study of history; (2) courses numbered 200-299 are considered intermediate in difficulty. Students taking these courses are generally expected to enter them with a firm grasp of fundamental historical facts and concepts; (3) 300 -level courses are advanced, are more focused and thematic in scope, require a higher level of preparation than 100 -level and 200 -level courses, provide significant historiographical and theoretical content, and, with smaller enrollments, provide opportunity for significant discussion and for substantive research papers. Prerequisites: The Historian's Craft (History 190), specific courses designated by the instructor, or permission of the instructor; (4) courses at the 400-level (tutorials, seminars, and theses) are reserved for the most advanced engagement with historical research and writing. Prerequisite: The Historian's Craft (History 190) or permission of the instructor.

Majors in history in the Classes of 2006, 2007 and 2008 must take a minimum of 10 courses, and a maximum of 14 . Advanced Placement credits do not count toward that total. Two European survey courses must be chosen from among the following: Rise of the Christian West to A.D. 1000 (HIST111); Emerging Europe, 1000-1500 (HIST112); Renaissance to Napoleon, 1500-1815 (HIST113); and Napoleon to the European Union (HIST114). First-year students with Advanced Placement scores of 4 or 5 in European History are exempted from this survey requirement and are allowed to take upper division courses in European history in their first year. Majors must take two United States history courses for the major, one of which may be an American Themes course. Students who have scored 4 or 5 in their Advanced Placement test in American history are exempted from entry level courses but must take two other U.S. history courses. Majors are required to take at least one course in the history of Africa, Asia, Latin America or the Middle East. Majors must also take at least two Pre-Industrial/PreModern courses. (A list of Pre-Industrial/Pre-Modern courses is on the Department's home page and is available at the departmental office.)

Majors in the Class of 2009 must take a minimum of 10 courses, and a maximum of 14 . Advanced Placement credits do not count toward that total. At least five courses must be at the 200 -level or above.

One European survey course must be chosen from among the following: Rise of the Christian West to AD 1000 (History 111); Emerging Europe, 1000-1500 (History 112); Europe: Renaissance to Napoleon, 1500-1815 (History 113); and Europe: Napoleon to the European Union (History 114). Majors must take at least one other course in European history numbered 200 or above. First-year students with Advanced Placement scores of 4 or 5 in European history are exempted from this survey requirement but must take two courses in European history at the 200 -level or above. Majors must take two United States history courses, one of which must be at the 200 -level or above. Majors are required to take at least two courses in the history of Africa, Asia, Latin America and/or the Middle East, one of which must be at the 200 level or above. Majors must also take at least two Pre-Industrial/Pre-Modern courses. (A list of Pre-Industrial/Pre-Modern courses is on the Department's home page and is available at the departmental office.) Majors are required to take The Historian's Craft (History 190); except for unusual circumstances and with the permission of the Department Chair, this course must be taken by the end of first semester of the junior year. The Historian's Craft is a prerequisite for all courses at the 300 -level or above.

Some courses, e.g. History 113 or History 106 (Origins of Japanese Culture), fulfill two requirements. Fourth-year majors will not be admitted to 100 -level courses, including the European survey courses (History 111-114), except under extraordinary circumstances and only with special permission from the Department Chair. First-year students are restricted to one history course a semester; upper class students should limit their schedules to two history courses per semester. All majors are strongly encouraged to take at least one seminar or tutorial to pursue more intensive historical study.

Historians study the process of change over time and examine all aspects of human experience in the past. History is among the most encompassing academic disciplines; it is informed by economics, sociology, anthropology, political science, the arts and literature. Majors should thus select courses in related disciplines to expand their historical insights and to acquire critical tools that will enhance their ability to pursue serious historical scholarship.

Students considering application to Holy Cross as history majors are strongly advised to pursue foreign language study in high school and to continue language study beyond the intermediate level at Holy Cross.

The Department of History offers the opportunity for fourth-year students to be nominated for the History Honors Program. Students aspiring to graduate with Honors in History are required to take a minimum of two seminars and to work closely with a member of the history faculty on a major research thesis. The Department Honors Program will enrich and inform a student's course of studies at Holy Cross, particularly the quality and direction of a student's major in history. The program involves significant commitment and work, offers the intellectual rewards of independent research and original writing, and recognition of outstanding achievement.

Advanced Placement Credit: As described above, students with AP credit in history earn placement in the history curriculum but not progress toward the minimum number of courses required by the major.
Courses Taught Outside the Department of History: History majors may apply for credit for a maximum of four history courses taught outside the Department toward the minimum of 10 courses which are required for the major. Certain restrictions apply: contact the departmental office for further information. Transfer students, students planning to study abroad, and students taking courses through the Consortium or in summer sessions must consult with the Department Chair.

## Courses

## History 101 - American Themes

Annually
An introduction to history as a mode of intellectual inquiry, this is an intensive reading, writing, and discussion course which is limited to 24 students. This course seeks to develop a sense of history through an in-depth study of selected topics and themes in American history. Emphasis is on student participation and the development of critical thinking. Readings involve some textual analysis, and there are frequent short papers. First year students only. Only one themes course may be applied toward the minimum of 10 courses needed for the major. One unit.
History 103 - Perspectives on Asia 1: "Traditional" East Asia Fall Introduces the major philosophical, political, social, religious and artistic traditions that developed in Asia prior to the twentieth century; examines the historical contexts in which those traditions evolved, and considers their legacy for the modern era. Students are also introduced to the historical discipline itself: the concepts, methods, and tools that historians use to study the past. Various works in translation (fiction, philosophical and religious tracts, chronicles) are used, together with films, slides, field trips, lectures and discussions. Fulfills non-Western requirement for the major. One unit.
History 104 - Perspectives on Asia 2: Modern Transformations
Fall
Focuses on historical and cultural movements in the Asian region. This a team-taught course and themes vary according to the interests and expertise of the Asian Studies faculty. Creative literature, anthropological accounts, journalists' reports, films and guest lecturers will be used to gain a multi-layered perspective of these complex societies. Fulfills non-Western requirement for the major. One unit.

## History 105 - Asia in Western Fiction \& Film

Spring
Examines and compares descriptions of Asia and portrayals of Asian societies found in Western novels, short stories and films produced since the mid-19th century, and relates them to colonial and post-colonial historical encounters between Asia and the West. Fulfills non-Western requirement for the major. One unit.
History 106 - Origins of Japanese Culture Alternate years in fall Surveys the development of Japanese social and political institutions, religion, art, and literature from prehistory to A.D. 1600. Particular attention is paid to the relationship between cultural and political change. Students also learn how archeological discoveries, painting, sculpture, poetry, fiction, and performing arts are used to study history. Fulfills non-Western requirement for the major. One unit.

## History 109 - The Ancient Near East and Greece

Fall
Examines the history of the Ancient Near East, Egypt, and Greece from the fourth millennium through the fourth century B.C. Studies and compares the evolution of ancient humanity from prehistoric origins through the growth of ancient empires with the very different model presented by Greek civilization through the death of Alexander the Great. Fulfills one pre-industrial/pre-modern requirement for the major. One unit.
History 110 - Rome: Republic and Empire
Spring
An examination of the growth and evolution of Rome from a city-state republic to its mastery of a Mediterranean empire. Concludes with the restructuring of the Empire by Diocletian and Constantine, and the patristic synthesis of Christian and pagan cultures. Fulfills one pre-modern/pre-industrial requirement for the major. One unit.
History 111 - The Rise of the Christian West to A.D. 1000
Fall, spring
Western history from the later Roman period to the formation of Europe in the 11th century. Covers political, religious, economic, social, artistic and legal developments in the fusion of Roman and Christian civilization, the disintegration of the Western Roman empire in the face of barbarian invasions, relations with the Byzantine Eastern Empire, the impact of Islam, rural and urban life, the Carolingian revival, and the impact of new peoples on the European scene. Fulfills one pre-modern/pre-industrial requirement for the major. One unit.

The emergence of Europe in the 11th century to the era of the Renaissance. Covers political, religious, economic, social, artistic and legal developments in the formation of European states and territorial monarchy, European frontier expansion, urban growth, the evolution of Romanesque and Gothic styles, and the conflict of church and state. Fulfills one pre-modern/pre-industrial requirement for the major. One unit.

History 113 - Renaissance to Napoleon: 1500-1815
Fall, spring
Social, cultural, religious, economic, and political developments in Europe from the Renaissance to the fall of Napoleon. Special emphasis on the Protestant and Catholic Reformations, the evolution of monarchical power, the rise of European overseas empires, the scientific revolution, the Enlightenment, the French Revolution, and the rise and fall of Napoleon Bonaparte. Fulfills one of pre-modern/pre-industrial requirements for the major. One unit.

History 114 - Napoleon to the European Union 1815-Present
Fall, spring
European history from the end of the French Revolution to the aftermath of the collapse of communism in Europe: industrialization, the rise of liberalism and nationalism, the revolutions of 1848, the creation of national states in Italy and Germany, evolution of a consumer culture, European imperialism in Asia and Africa, art and culture of the 19th and 20th centuries, World War I, the rise of Bolshevism, fascism and Nazism, World War II, the history of the Cold War, western European integration, , the collapse of communism in Eastern Europe, the breakup of the Soviet Union, and the formation and growth of the European Union. One unit.
History 115 - Historical Themes Annually
An introduction to history as a mode of intellectual inquiry, focusing on a particular theme which changes each semester. Themes courses develop a sense of history through an in-depth study of selected topics; they involve intensive reading and discussion. Only 24 students are enrolled in a Themes course and discussion sections are conducted in small groups of no more than 12 students. Emphasis is placed upon student participation and the development of critical thinking. Readings involve some textual analysis, usually of primary sources. These courses are limited to first year students. Only one themes course may be applied toward the minimum of 10 courses needed for the major. One unit.
History 121 - Making of the Modern Middle East
Fall
This course examines the making of modern Middle Eastern states and societies from World War I to the present, including the Arab countries as well as Iran, Israel and Turkey. Against the backdrop of the rise of European economic and political domination vis-a-vis the Middle East and expanding relations of capitalist production in the 18th and 19th centuries, the course surveys the main political, social, economic, and intellectual currents of the 20th-century Middle East with an emphasis on historical background and development of current problems in the region. Topics include imperialism, nationalism, state and class formation, religion, Orientalism, women, the politics of oil, the Arab-Israeli conflict, the Iranian revolution, the Gulf War and $9 / 11$ and its aftermath. Fulfills non-Western requirement for the major. One unit.
History 190 - The Historian's Craft
Annually
This course is an introduction to historical methods and to historiography-that is, how history is written and interpreted, and how the discipline or a topic within it has evolved. Students will learn how historians formulate questions or lines of inquiry, how to locate and read primary sources, how to use secondary sources, how to develop research topics that are incisive and focused, and how to organize and present one's research in oral and written form. Required of all history majors starting with the Class of 2009. One unit.
History 199 - Introductory Topics in History Annually
These courses explore various subjects in the historical sciences, emphasizing reading, discussion, and writing on a topic selected by the instructor. Course format and subjects vary from year to year. One unit.

Beginning with the early civilizations of Mesopotamia, Mesoamerica, China, and the Mediterranean, this course integrates human experience with the natural order. The course examines changing ratios of humans to the land and of humans to other species and the impact of the transfer of plants, animals, and diseases between the hemispheres after 1492 . We will also consider how perceptions of nature have differed over time. Case studies of environmental crises in the contemporary world will be based on their 19th- and 20th-century roots. One unit.

History 201 - Colonial America
Fall
The exploration, settlement, and development of North America from the late-16th to the mid-18th century. Special emphasis: comparative analysis of the backgrounds, goals, and accomplishments of the original colonists; social structure, economic development, and religious life; immigration and white servitude; slavery; Indian-white relations; and development of the British imperial system. One unit.

History 202 - The Age of the American Revolution, 1763-1815
Spring
The American Revolution and independence in the context of Anglo-American ideas and institutions. Special emphasis: imperial reorganization after the Seven Years' War; colonial resistance and loyalty; revolutionary ideology; social and political consequences of the Revolution; Confederation and Constitution; political parties under Washington, Adams, and Jefferson; and impact of the French Revolution and Napoleonic Wars on the U.S. One unit.
History 203 - The Age of Jackson: 1815-1860
Alternate years in fall
American life and politics between the time of the Founding Fathers and the Civil War. Emphasizes Jackson's role as a national hero and political leader; constitutional issues; political and economic developments; continental expansion; antebellum literature, social life, and reform; and the breakup of the Jacksonian consensus as a prelude to the Civil War. One unit.
History 204 — Lincoln and His Legacy, 1860-1900
Alternate years in spring
American life and politics from the Civil War to the end of the 19th century. Emphasizes Lincoln's leadership and vision, the proximate causes and military progress of the Civil War, "Reconstruction" of the former Confederate states, the impact of the industrial revolution on American society, the consequences of federal efforts to settle the trans-Mississippi West, Populism, and other political developments. One unit.

History 205 - U.S. in the 20th Century 1 (1890-1945)
Fall
Examines the major political, economic, social and cultural forces that contributed to the modernizing of America. Special emphasis on: industrialization and Empire; the impact of racial, gender, class and ethnic struggles for justice with a democratic republic; "Americanism"; the expanding role of the government in the lives of its citizens; labor and capitalism; popular and consumer culture; war and homefront. One unit.
History 206 - U.S. in the 20th Century 2 (1945-present)
Spring
Examines the major political, economic, social and cultural forces of the post-WWI era. Special topics include: Reorganizing the post-war world; McCarthyism; consumer and youth culture; the Civil Rights Movement; the New Left and the Vietnam War; the women's movements; Watergate and the resurgent Right; and post-Cold War America. One unit.
History 207 - 19th Century U. S. Diplomacy
Fall
Studies the foundations and development of American diplomacy to the turn of the 20th century, with emphasis on the American presidents and their secretaries of states. One unit.
History 208 - 20th Century U. S. Diplomacy
Spring
A study of the foreign policies and relations of the U.S. with respect to the nations of the Americas, Europe, Asia, the Middle East, and Africa, with an emphasis on the American presidents and their secretaries of state during the 20th century. One unit.

History 211 - Labor and Capital in America

This course examines the origins, development, and maturation of the Industrial Revolution in America, from 1800 to the present, with a special emphasis on the experience of workers and the labor movement they built. It also takes into account the perspectives and interests of capitalists and the American entrepreneurial tradition to provide as full and complete a picture possible of the often contentious relations between workers and their employers. One unit.
History 214 - Comparative Women's History
Alternate years
From the Victorian era of the 19th century to the age of the New Woman in the early 20th century, women's roles in society changed dramatically with the evolution of women's education, changing gender roles, the transformation of women's work, and the impact of the women's rights movement. Themes of the course include changes in women's education, new constructions of sexuality, women's entry into the medical, legal and teaching professions, and the effects of nationalism, imperialism, and two world wars on women's roles, as well as the changing images of womanhood in the arts, film and literature. One particular focus will be the role of gender and sexuality in the development of nationalism, fascism and national socialism in the early twentieth century. One unit.

## History 215 - American Social Gospel

Alternate years
This course will examine the response of American Christians to the political and social problems confronting the United States. These problems include labor conflict, slavery, racism and civil rights, feminism and the women's movement, poverty, war and weapons, and the decline of citizenship. The readings will combine theology and social history. One unit.

## History 216 - American Religious History

Alternate years
A study of the American religious experience from colonial times to the present with an emphasis on the major religions, persons, institutions, and movements. One unit.
History 217, 218 - Family in American History 1, 2 Annually
A study of the history of the American family. The first semester deals with the family in America from the English background of colonization in the 16th and 17th centuries to the middle of the 19th century. The second semester covers the mid-19th century to the present. One unit each semester.
History 219, 220 - African-American History 1, 2
Annually
The first semester, 1619-1865, explores the passages from Africa to America, and from slavery to freedom. The course will examine in detail 1) the origins of American slavery, and the role of racism and racial ideology, combining with democracy to form America's "peculiar institution;" 2) the plantation system in maturity; 3) slave resistance and abolitionism; 4) the Civil War and emancipation. The second semester, 1865 to present, explores the problem and promise of freedom, reconstruction, the triumphs of white supremacy, segregation and Booker T. Washington. The course will trace the movement of African Americans through the Great Migration, the Harlem Renaissance, down through to the time of the Civil Rights era. One unit each semester.
History 221 - American Urban History
Alternate years
A study of the role of cities in American life and thought from the colonial period to the present, with emphasis on the popular experience of city life, the evolution of municipal government, the organization of urban space, the emergence of suburbs and inner-city ghettoes, and visions of the ideal city in the United States. One unit.
History 222 - Great Leaders
Alternate years
A biographical study of leadership on the international scene as reflected in the persons who have shaped the social, political, intellectual, religious, and economic history of the 20th century. Does not fulfill U.S. history requirement. One unit.
History 223 - Radicalism in America

Americans recognize that we live in a profoundly different nation than that which was created out of the American Revolution. Citizenship, itself, has changed. Civil society has been expanded such that we feel quite confident in our belief that the United States today is a fairer and more just nation in relation to the status of women, African Americans, and working people. We might account for these changes in various ways-the genius of the Founding Fathers, the general prosperity of the nation, even the feeling (an article of faith for some Americans) that "things" just always get better over time. This course is based on the idea that these changes have been the result of human effort, and that the efforts of American radicals have been essential to the rise of the American democracy. We shall examine the thought and action of radicals of various stripe and means, from Tom Paine to Martin King, from the brutal war on American slavery attempted by Nat Turner and John Brown, to the more genteel fight against patriarchy waged by Elizabeth Cady Stanton and Susan B. Anthony, and look closely at the various efforts of Wobblies, Syndicalists, and Reds to advance the cause of industrial democracy. One unit.

History 224 - Catholicism in the United States
Annually
A historical examination of the development of the Catholic Church and its people in the U.S. Particular attention devoted to issues of church and society as they have developed since the 19th century. One unit.

History 226 - Irish American Experience
Alternate years in fall
Examines the historical experience of the Irish, one of the largest ethnic groups in America. The Irish in America have left an indelible mark on the nation's economy, politics, and culture, while at the same time they have been shaped by their adoptive country. Among the many topics it addresses include: colonial era immigration, the Famine, changes in ethnic identity, class conflict and the labor movement, the Catholic Church, machine politics and political affiliations, culture and the arts, nationalism and the fight for Irish freedom, upward mobility and the quest for respectability, relations with other ethnic and racial groups. One unit.

History 227 - American Immigration to 1882
Alternate years in fall
A survey of immigration from the colonial period to the era of the Civil War. Topics include colonial immigration and the emergence of an American identity; 19th-century immigration from Ireland, Germany, Scandinavia, and China; 19th-century nativism; Asian immigration, and the Chinese Exclusion Act of 1882. One unit.

History 228 - American Immigration since 1882
Alternate years in spring A survey of immigration since the era of the Civil War. Topics include new immigration from southern and eastern Europe, the growth of sentiment for immigration restriction, assimilation in the wake of the National Origins Act of 1924, refugee immigrants, Hispanic-American and Asian immigrants, and immigration legislation since 1945. One unit.
History 231 - Medieval England to 1216
Alternate years in spring
Examines the political, social, legal and economic developments in England and the Celtic fringe from the prehistoric period, through the Roman and Anglo-Saxon invasions, into the Norman and Angevin eras, ending in 1216 with Magna Carta and the death of King John. Topics include the Romanization of Britain, the growth of Christianity, the roles of medieval women and minority groups, crime and violence. Fulfills one pre-modern/pre-industrial requirement for the major. One unit.

## History 232 - Medieval Lives

Alternate years in spring
Focuses on medieval life-writings dealing with personal expressions of the intersection of faith and action, personal identity and communal responsibility. Chosen works deal with basic questions of morality and ethics, and exhibit the variety of rhetorical methods by which to communicate these issues. Readings range from Augustine's Confessions, the autobiographies of Guibert of Nogent and Peter Abelard, to the trial testimony of Joan of Arc. Fulfills one pre-modern/pre-industrial requirement for the major. One unit.

Louis XI. Emphasizes the institutional development of the state, the vital role of Christianity in the religious, political and intellectual life of France, the evolution of social life and social classes, and the rich artistic and architectural heritage of this era in French history. Fulfills one pre-modern/pre-industrial requirement for the major. One unit.

## History 234 - Medieval Spain

Alternate years in spring
The historical evolution of the peoples of the Iberian Peninsula from their Roman experience to the creation of Spain as a political entity at the end of the 15th century. Emphasis is placed on political, social, economic, religious and artistic development, and the influence of the Visigothic and Muslim invasions and the Reconquest on the shaping of Luso-Hispania. Fulfills one pre-modern/pre-industrial requirement for the major. One unit.

## History 236 - Renaissance Europe

Alternate years in fall
Surveys the significant intellectual, cultural, social and political developments across Europe, beginning with the social and economic structures of family life during the early Italian Renaissance, continuing with the political and artistic expressions of the Italian city-states, and tracing the spread of Renaissance influences to northern Europe through the early 16th century. Fulfills one pre-modern/pre-industrial requirement for the major. One unit.
History 237 - The Reformation
Alternate years
The most significant political, intellectual, and religious developments of the Protestant and Catholic Reformation movements in $16^{\text {th }}$ - and $17^{\text {th }}$-century Europe. Fulfills one pre-modern/pre-industrial requirement for the major. One unit.
History 238 - The Papacy in the Modern World
Alternate years
Examining the evolution of the papacy from the Renaissance to the present, this course considers the various roles played by the popes, not only in church government, but also in the arts, in politics and diplomacy, and in international advocacy of peace and justice. One unit.

## History 239 - Louis XIV's France, ca. 1560-1715

Alternate years
Studies the politics, religion, society, and culture of early modern France, from the Wars of Religion to the end of the reign of Louis XIV. Considers how and why France was the 'superpower' of the seventeenth century. One unit.

## History 240 - French Revolution and Napoleon

Alternate years in Spring
From the Enlightenment to the Revolutions of 1789, 1830and 1848, the focus is on the history of the French Revolution, its causes and effects and the historical controversies which continue to surround almost every aspect; but the course also includes the transition to an industrial economy, the evolution of new social classes, changing gender roles, designs for social change, and literary and artistic movements. One unit.

History 241 - Modern France
Fall
This course is designed to deepen students' understanding of the role France has played in European culture and in particular in literature, the visual arts and film. A second theme is France's ongoing relationship to the rest of the world as France developed and then lost a far-flung empire from New Caledonia to West and North Africa. We will also examine France's many contributions to gastronomy and wine-making as part of France's cultural patrimony. Most importantly, students should come to appreciate France's central role in the movement toward European unity since World War II. One unit.

## History 245 - Imperial Russia <br> Spring

Is Russia part of Europe or something other? One of the main themes of Russian history has been her paradoxical and sometimes strained relations with the West, at times based on ideological or technologi-
cal borrowing, at times on rejecting the West's values and struggling to maintain Russia's own. Focus is on this element of the Russian experience, as well as the role of ideas in Russian history, and the tensions between reform and revolution in Russia's political life. Examines the factors that promoted the building, then the dismantling of Russia's autocratic government in the imperial period, from 1689 to 1917. One unit.

## History 253 - Russia in the 20th Century

Alternate years
Studies the main stages in Russia's 20th-century experience: the Russian Revolutions, 1905-1921; the development of a new order, the Soviet Union, 1921-1941; World War II and the Soviet super power, 1941-79; and stagnation and the end of Soviet Union, since 1979. One unit.
History 255 - Europe: Mass Political/Total War 1890-1945
Alternate years in fall From the high point of European global power and cultural influence, Europe moved into an era of world war, popular millenarian ideologies, dictatorships, and unprecedented mass murder. This course examines the origins, evolution, and impact of the modern European ideological dictatorships, from the cultural ferment and socioeconomic change that characterized the pre-1914 "belle époque" through the two world wars. Topics include: modern art; liberalism and its discontents; the origins and nature of World War I; the Russian revolutions; the Versailles peace settlement; the struggling interwar democracies; the economic crises; communism and fascism; the Italian, German, and Soviet dictatorships; the Spanish Civil War; and the origins of World War II. One unit.
History 256 - Europe and the Superpowers: 1939-1991 Alternate years in spring Postwar Europe was shaped in part by four major influences: the clash between Western liberalism and Soviet communism; the withdrawal from overseas empires; the effort to come to terms with the legacy of world war, and the creation of integrative European institutions. Concentrating on Europe, this course examines reciprocal influences between the Europeans and the two peripheral superpowers (USA and USSR) of the Atlantic community. Topics include: World War II, the Holocaust, science and government, the Cold War, the division of Europe, the revival and reinforcement of western European democracy, denazification, Christian democracy, the economic miracle, European integration, the strains of decolonization, the rise of Khrushchev, the Berlin crises, De Gaulle and his vision, protest and social change in the sixties, the Prague Spring, Ostpolitik and detente, the oil shocks, the Cold War refreeze, the Eastern European dissidents, the environmental movement, Gorbachev's reforms, and the collapse of communism. One unit.

## History 261 - Germany in the Age of Nationalism

Alternate years in spring Late to unify, late to industrialize, and late to acquire democratic institutions, Germany had to cope with all three processes at once, with tragic consequences for human rights and international order. This course analyzes the development of German nation-building from the time of Metternich, through the age of Bismarck and the Kaisers, to the Weimar Republic and the rise of Hitler. We explore the trends and circumstances in German and European history that came together to produce Nazism. But we also explore the presence of diversity, the alternative pathways, and the democratic potential in pre-Nazi German history. Topics include religious tension and prejudice (Catholics, Protestants, and Jews), Prus-so-Austrian duality, the German confederation, the revolution of 1848, German national liberalism, Bismarck's unification and its legacy, imperial Germany under the Kaisers, German socialism, World War I, the revolution of 1918, the Weimar Republic, and the Nazis. One unit.

## History 262 - Germany from Dictatorship to Democracy

Alternate years in fall
In Western Germany after World War II, a people that once had followed Hitler now produced perhaps the most stable democracy in Europe. At the same time, eastern Germans lived under a communist dictatorship that lasted more than three times as long as Hitler's. What is the place of the two postwar

Germanies in the broader context of German and European history? To what degree were the two German states a product of their shared past, and to what degree were they products of the Cold War? What are the implications for reunified Germany? This course explores these questions by examining the history of democracy, dictatorship, political ideology, and social change in modern Germany. Topics include: Marx as a German; liberalism, socialism, communism, and political Catholicism in pre-Nazi Germany; popular attitudes toward Nazism; the legacy of Nazism and the Holocaust; the Allied occupation; de-Nazification, the Cold War, and the partition of Germany; Christian Democracy and Social Democracy; the Adenauer era, the Berlin crises, and the economic miracle; German-German relations and the Ostpolitik of Chancellor Willy Brandt; protest politics, Euromissiles, and the Green movement; the development and collapse of East Germany; and Germany since reunification. One unit.

## History 267 - Modern Italy

Fall
Italy has a distinguished past, but its political unification occurred only in 1861. This course analyzes the process of unification, the social and cultural life of 19th-century Italy, the deep divisions between the north and the south, Italy's role in both world wars, Fascism and resistance to Fascism, the postwar economic miracle, the role of the Mafia in Italian politics, and Italy's role in the formation of the European Union. One unit.

## History 281 - Imperial China

Alternate years in fall
Surveys Chinese political history from the formative era of the imperial system in the fourth century B.C. through the Communist revolution in 1949. Themes demonstrate how the tradition has shaped and is reconstructed to suit contemporary agendas in China. Films, biographies, historical and philosophical writings, and western interpretations of events and personalities offer a variety of perspectives. Fulfills non-Western and one pre-modern/pre-industrial requirement for the major. One unit.

## History 282 - Revolutionary China

Alternate years in spring Introduces students to events, personalities, and concepts of particular significance for understanding China's 20th-century history. Covers the period from 1911 through the present in some detail through a variety of documentary sources, interpretive accounts, and literature. Fulfills non-Western requirement for the major. One unit.

## History 286 - Modern Japan

Spring
Part One provides a chronological overview of early-modern and modern Japanese history from the 17th century to the present. Part Two closely examines the dilemmas of modernization posed for Japan between the 1860s and the 1930s, the choices Japan made, and their consequences. Topics include: industrialization and economic change; law and politics; education, religion, and the state; diplomacy and war; and cultural currents. Fulfills non-Western requirement for the major. One unit.
History 287 - The Pacific War
Spring
Examines the origins, conduct, impact, and legacy of the Pacific War. While the primary focus is on the years between the Manchurian Incident of 1931 and Japan's surrender to the Allied Forces in September 1945, significant attention is also given to the period between 1868 and 1930, when Japan came of age as a modern imperialist nation competing with the Western colonial powers for power, territory, and influence in East and Southeast Asia-as well as to the legacy of the war in the years since 1945. Fulfills non-Western requirement for the major. One unit.

## History 288 - Japan Since the Pacific War

Fall
Examines the political, economic, social, intellectual, and cultural history of Japan since 1945. Some comparisons are made with the prewar period, in order to place these developments within a broader historical context. Topics include: individual, community and state; religion, education and socialization; gender relations; industrial development and its consequences; Japan and the global community;
and postwar interpretations of Japanese history. Fulfills non-Western requirement for the major. One unit.

## History 290 - Vietnam: More Than an American War

Alternate years in spring Examines Vietnam in terms of its own unique history and culture through a wide range of materials produced by Vietnamese writers, historians and filmmakers. Covers the Vietnam-American War with an eye to understanding all sides involved and with a critical approach to information. Examines different perspectives of a conflict that continues to trouble both sides by using new materials from Vietnamese and American participants. Films, memoirs and creative literature will offer students a sense of the tenor of life in post-war Vietnam. Fulfills non-Western requirement for the major. Does not fulfill U.S. history requirement. One unit.
History 291 - Tarnished Gold: Asian Experiences in America
Alternate years in fall Explores the myriad experiences of Asian immigrants and sojourners who have come to America in search of peace and prosperity since the 19th century. Examines the context that propel Asian peoples from their homelands to the United States and explores the barriers and opportunities that affect their responses. Draws from a wide range of resources to recognize as well the contributions that Asian peoples have made to American culture and politics. Explores the many ways that ordinary people have coped with a contradiction in American culture, which celebrates pluralism and diversity, yet encourages assimilation and conformity. Takes up current issues as well as those that have become a part of our national story. One unit.
History 292 - Central America and the Hispanic Caribbean
Alternate years in spring Examines the history of Central America and the Hispanic Caribbean (Cuba, Puerto Rico, Dominican Republic) since the early 19th century. It is organized around the concept of national political histo-ries-that is, the formation of independent states after centuries of Spanish colonial rule. Within this framework we will also examine aspects of the social history and economic development of the region, including the study of land and labor systems, gender relations, race and ethnicity, community and class formation, military dictatorship revolutionary movements, and transitions to electoral democracy. Fulfills non-Western requirement for the major. One unit.
History 293 - Ottoman Empire 1, 1300-1600 Fall
In the mid-16th century, all of Europe feared the power of the "Grand Turk", whose empire stretched from Baghdad to Budapest and from the Adriatic to the ports of the Red Sea. Its population was made up of Muslims, Christians, Jews, Turks, Greeks, Armenians, Arabs, Kurds, Serbs and Bosnians, to name only a few. This course surveys the emergence of this demographically diverse and geographically vast Ottoman state from a small frontier principality into a world empire in its social, political and cultural contexts. Fulfills non-Western and one pre-modern/pre-industrial requirement for the major. One unit.
History 294 - Ottoman Empire 2, 1500-1922 Spring
This course surveys the major themes in the history of the Ottoman 17th-20th centuries in an effort to understand transformations in state and society, which have collectively been termed by historians, "decline." Topics include transformations in the classical Ottoman land and military systems, forms of protest and rebellion, the formation of provincial magnates, Ottoman incorporation into the world economy, reform and revival, the Eastern Question and the rise of local nationalisms throughout the empire. Fulfills non-Western and one pre-modern/pre-industrial requirement for the major. One unit.

History 295 - Mexico since Independence
Alternate years in fall
Introduces students to the national history of Mexico (1820s-1980s). Themes include the formation and experience of peasants, workers, elites and middle sectors, the formation of the Mexican nationstate, foreign intervention and internal instability, development and industrialization, popular political participation, labor history, agrarian reform, state involvement in the economy, the rise and decline of the PRI, relations with the U.S., and struggles for democracy, economic rights, and social justice. Fulfills non-Western requirement for the major. One unit.

Provides an introduction to Latin American history from pre-Columbian to modern times emphasizing native cultures, the conquest of the New World, the creation of colonial societies in the Americas, race, gender and class relations, the functioning of the imperial system, the formation of a peasant communities, and the wars of independence. Fulfills non-Western and one pre-modern/pre-industrial requirement for the major. One unit.
History 297 - Latin America Since Independence
Spring
Surveys the history of 19th- and 20th-century Latin America, focusing on six countries. Topics include the formation of nation-states, the role of the military, the challenges of development and modernization, the Catholic church and liberation theology, social and political movements for reform or revolution, slavery, race relations, the social history of workers and peasants, and inter-American relations. Fulfills non-Western requirement for the major. One unit.
History 299 - Intermediate Topics in History Annually
These courses explore various subjects in the historical sciences, emphasizing reading, discussion, and writing on a topic selected by the instructor. Course format and subjects vary from year to year. One unit.

## History 305 - America's First Global Age

Alternate years
We talk a great deal about "globalization" and "global economies" during the late twentieth and early twenty-first century. However, people living in America were touched by global economic processes as early as the time of Columbus. This course explores North America's first global age beginning in the 1400 s and extending through the 1860s. It examines this history thematically by focusing on various kinds of trades and industries such as gold, fish, timber, tobacco, silver, sugar, alcohol, fur, coffee, tea, and cotton. In addition to economic processes, the course addresses the social, cultural, and political implications of these global trade connections for Americans of African, European, and Native descent. One unit.

History 320 - Medieval England: 1216-1485
Alternate years in fall Political, legal, social, and economic development in England and the Celtic fringe from 1216 and the reign of Henry III to the death of Richard III in 1485. Covers the growth of English common law and Parliament, especially during the reign of Edward I 1272-1307; agriculture and society, particularly during the years of demographic expansion in the 13th century and contraction after the Black Death; disturbances of the Hundred Years' War, the Wars of the Roses, and the role of crime and violence in medieval society. Fulfills one pre-modern/pre-industrial requirement for the major. One unit.

## History 322 - War and Cinema

Alternate years in fall
Examines the depiction of war in American and British cinema, contrasting filmed versions to historical events, ranging from Medieval Europe to the jungles of Vietnam. Reading includes analysis of both the historical events and the background to the filmed versions. Emphasis given to the nature of film as a primary source reflecting the perspectives of the society generating it. One unit.

## History 324 - Italy and France: War \& Resistance

Alternate years in spring Focuses on the nature of resistance to the Fascism in Italy and to the French State under Vichy, and provides the opportunity for more advanced study of Italian and French history to students already familiar with the general history of modern France or modern Italy or those with an interest in the period of the Holocaust and World War II. Traces the emergence of intellectuals out of the opposition to fascism, the postwar political generation by the experience of war and the resistance to fascism by reading the works of Carlo Levi, Ignazio Silone, Primo Levi, Albert Camus, Marguerite Duras, Iris Origo, Jean Paul Sartre and Simone de Beauvoir and others. One unit.

History 350 - Latino History
Alternate years in fall
Introduces students to the emerging field of United States Latino history. While the course emphasizes the intersection of U.S. and Latin American national histories, the migration process, and the formation of communities within the United States, it also examines the experience of Latinos in the U.S. through inter-disciplinary themes that include ethnicity, poverty and social mobility, identity, popular culture, and politics-all in historical perspective. Readings will stress the experiences of people from Puerto Rico, Mexico/U.S. Southwest, Dominican Republic, Cuba, and Central America. One unit.
History 360 - The Warrior Tradition in Japan
Alternate years in fall
One of the most popular and durable of Japanese icons is the samurai warrior. Like all traditions, that of the Japanese warrior has evolved over time through a combination of fact and fiction, reality and myth. This course examines both of these histories: the rise and fall of the warrior class itself between the ninth and late-19th centuries; and the evolution of the warrior tradition, which arguably began even earlier and persists today. Various works in translation (legends, war tales, plays, short stories, autobiographies), films, slides, field trips, a martial arts demonstration, student-designed skits, lectures, and discussions are used. Fulfills non-Western requirement for the major. One unit.

## History 399 - Advanced Topics in History

Annually
These courses explore various subjects in the historical sciences, emphasizing reading, discussion, and writing on a topic selected by the instructor. Course format and subjects vary from year to year. One unit.
History 401 - History Seminar Fall, spring
An intensive research-oriented study on various themes; offered each semester; limited to 12 participants. One unit.
History 408 - Tutorial
Fall, spring
Reading of selected sources, with individual written reports and discussion, under the direction of a member of the department. Students enrolled in a tutorial must receive the approval of the instructor. One unit.

History 420, 421 - Fourth-Year Thesis
Annually
An individual, student-designed, professor-directed, major research project. Usually available only to outstanding fourth-year majors. A lengthy final paper and public presentation are expected. Students engaged in a thesis may be nominated for Honors in History. One unit each semester.

# Mathematics and Computer Science 

John T. Anderson, Ph.D., Professor and Chair
Thomas E. Cecil, Ph.D., Professor
John B. Little III, Ph.D., Professor
David B. Damiano, Ph.D., Associate Professor
Alisa A. DeStefano, Ph.D., Associate Professor
Margaret N. Freije, Ph.D., Associate Professor and Associate Dean
Laurie A. Smith King, Ph.D., Associate Professor
Catherine A. Roberts, Ph.D., Associate Professor
Edward J. Soares, Ph.D., Associate Professor
Cristina Ballantine, Ph.D., Assistant Professor
Joseph J. DeStefano, Ph.D., Assistant Professor
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Andrew D. Hwang, Ph.D., Assistant Professor
Steven P. Levandosky, Ph.D., Assistant Professor
Gareth E. Roberts, Ph.D., Assistant Professor
Constance S. Royden, Ph.D., Assistant Professor
Richard A. Lent, Ph.D., Lecturer
The primary goal of the programs in mathematics and computer science at Holy Cross is to enable students to become active participants in the study of fundamental and dynamic areas of human endeavor. The inherent structure and beauty of mathematics is at the core of all mathematical inquiry. Mathematics is also the language of the sciences and social sciences, and in our increasingly technology-driven society, it is becoming part of our daily public discourse. Computing has become an indispensable tool for scientific and mathematical experimentation. The academic discipline of computer science studies algorithms, data structures, and their realization in software and hardware systems. It addresses the fundamental questions: What is computable in principle? And what tasks are algorithmically feasible? Thus the programs in mathematics and computer science are both informed by other disciplines and seek out ways that mathematics and computing have an impact on the world at large. In this context the department works toward helping students to become knowledgeable and sophisticated learners, able to think and work independently and in concert with their peers.

The department offers a number of introductory courses, a major in mathematics, a major in computer science and a minor in computer science open to students majoring in any department, including mathematics. Computing courses do not count toward the maximum number of courses which may be taken in one department for mathematics majors, nor do mathematics courses count toward the maximum number of courses which may be taken in one department for computer science majors.

## Advanced Placement and Introductory Courses

Students who have received a score of 4 or 5 on the AP Calculus AB exam will earn one unit of credit, and are advised to take Mathematics 136, Mathematics 126, or Mathematics 132. Students will forfeit their AP credit if they opt to take Mathematics 125,131 , or 133 . Students who have successfully completed a year of calculus in high school, but who did not take the AP exam, or who scored a 3 or lower on the AP Calculus AB exam should still consider starting with Mathematics 136 (AP Calculus), since much of the material in Mathematics 125, Mathematics 131, or Mathematics 133 will be review. Successful completion of Mathematics 136 fulfills any college requirement for a full year of calculus.

Students who receive a score of 4 or 5 on the AP Calculus BC exam and an AB subscore of 4 or 5 will earn two units of credit and are advised to take Mathematics 241 (Multivariable Calculus). One AP credit will be lost if the student starts in Mathematics $126,132,134$, or 136 , and both credits will be lost if the student starts in Mathematics 125,131, or 133 . Students who receive a score of 3 or lower on the BC exam and an AB subscore of 4 or 5 will earn one unit of credit and are advised to take Mathemat-
ics 136, Mathematics 126, or Mathematics 132 . Students will forfeit their AP credit if they opt to take Mathematics 125, 131, or 133.

The sequences Mathematics 125, 126 and Mathematics 131, 132 (or 133, 134) are alternatives to each other. No student may earn credit for any two of Mathematics 125, 131, and 133. Mathematics 125,126 is normally a terminal sequence. Students considering taking additional mathematics courses beyond first year calculus should begin in Mathematics 131, 136 or 241.

Students who have received a score of 4 on the AP Computer Science AB exam or a score of 4 or 5 on the AP Computer Science A exam will earn one unit of credit (for Computer Science 131, Techniques of Programming), and are advised to take Computer Science 132 (Data Structures). Students will forfeit their AP credit if they opt to take Computer Science 131 or 110. Students who have received a score of 5 on the AP Computer Science AB exam will earn one unit of credit and are advised to take Computer Science 226 (Computer Systems and Organization). Students will forfeit their AP credit if they opt to take Computer Science 131 or 110.

## The Major in Mathematics

At least 10 semester courses in mathematics are required for the major. The foundation consists of required courses in calculus and algebra: Mathematics 131, 132 (or equivalents), 241, 242, 243, and 244. Mathematics majors begin their studies in the three-semester Mathematics 131, 132, 241 calculus sequence. Majors who enter with advanced placement credit in calculus or who have taken a year-long calculus course in high school may begin in Mathematics 136 or Mathematics 241 as appropriate. Advanced placement credits may be used to count toward the 10 required courses for the major. Students who need a more intensive first course may also begin in Mathematics 133, 134. The calculus sequence is followed by the one-semester course Principles of Analysis (Mathematics 242), which studies the theoretical foundations of the calculus. In addition, in their second year, mathematics majors normally take the two-semester sequence Algebraic Structures and Linear Algebra (Mathematics 243, 244).

Beyond the basic courses discussed above, majors are required to take at least four courses numbered above 300. These courses are electives, subject to the guiding principles that each major's course selections should include both a broad range of courses within mathematics and a study of at least one area in depth. Beginning with the class of 2004, to demonstrate breadth, mathematics majors must complete at least one semester course in three of the following four areas: Analysis, Algebra, Geometry and Topology, and Applied Mathematics. The course listings that follow show which regular upper-level mathematics courses fall within each of the four breadth areas, and all majors will consult with their academic advisers no later than the end of their second year to plan their major course selections with this requirement in mind. The four upper-level courses must also include a full-year linked sequence in some subject to provide depth.

Majors are encouraged to take advantage of the close student-faculty contact afforded by upper-division seminars, independent study projects, and departmental honors, which permit students to explore topics of mutual interest to students and faculty that are not part of the regular course offerings. Also, throughout the curriculum, in courses and in independent work, students are able to explore and utilize the growing relationship between mathematics and computing.

## The Major in Computer Science

Computer Science Majors must complete a minimum of 10 one-semester courses in computer science. These include seven required core courses and at least three additional upper-level (numbered 300 or above) electives. In addition, all majors must complete the equivalent of one semester of calculus.

The required computer science core consists of three introductory, two intermediate and two up-per-level courses. The introductory core courses are the two semester Computer Science 131-132 (Techniques of Programming and Data Structures) sequence and Computer Science 135 (Discrete Structures), a course dealing with the discrete mathematical foundations of the subject. Mathematics 243 (Algebraic Structures) may be substituted for Discrete Structures with the approval of the department chair. The
intermediate core courses are Computer Science 226 (Computer Systems and Organization) and Computer Science 235 (Analysis of Algorithms), and the upper-level core courses are Computer Science 324 (Programming Languages Design and Implementation) and Computer Science 328 (Ethical Issues in Computer Science).

In addition to the core courses, majors are required to take at least three elective courses numbered above 300 . We strongly recommend that students take at least one upper-level course carrying the project course designation. A project course allows students to combine skills and concepts they have previously learned during their undergraduate courses with new material in a complex implementation task. The project course is often scheduled for the last year of undergraduate study, where it can serve as a capstone for the undergraduate experience.

## The Minor in Computer Science

The requirements for the computer science minor include seven courses in total-two dealing with mathematical foundations and five in computer science. The mathematics requirements are one course in calculus-either Mathematics 125, Mathematics 131, Mathematics 133, Mathematics 136, or advanced placement credit. Prospective computer science minors satisfying this requirement with Mathematics 125, Mathematics 131, or Mathematics 133 are strongly encouraged to continue with the second semester course Mathematics 126, Mathematics 132, or Mathematics 134 as appropriate. In addition, computer science minors are required to take Computer Science 135 (Discrete Structures), a course dealing with the discrete mathematical foundations of the subject. Mathematics 243 (Algebraic Structures) may be substituted for Discrete Structures. The required computer science courses are the Computer Science 131, 132 (Techniques of Programming-Data Structures) sequence, Computer Science 226 (Computer Systems and Organization), and either two additional 300 -level courses in computer science, or Computer Science 235 (Analysis of Algorithms) and an additional 300-level course.

Interested students also may take advanced courses in computer science through the cross-registration program of the Worcester Consortium.

## Other Information

Facilities available for study and research are excellent. The O'Callahan Science Library in the Swords Science Center and the College's extensive major computing facilities are described elsewhere in the Catalog. In addition, computer science and mathematics students will have the opportunity to use the Department's PC laboratory in the lower-division courses and UNIX network in upper-division courses.

Students who are interested in teaching mathematics at the secondary school level and wish to undertake the College program leading to licensure, should consult with the Department Chair and with the Director of the Teacher Education Program early in the sophomore year. Students who are interested in majoring in mathematics and participating in the 3-2 Program in Engineering should consult with the director of that program and the Chair of the Department.

## Mathematics Honors Program

The program has two levels of distinction, Honors and High Honors. Each requires that the student develop a solid foundation in the core areas of real analysis and algebra and that the student build on this foundation by taking a full complement of courses within the department. High Honors is distinguished from Honors by the successful completion of a fourth-year honors thesis. Any questions concerning the program should be directed to the Departmental Honors Program Director or the Department Chair.
Course Requirements for Honors. All regular course requirements for the mathematics major. In addition, for Honors, students must take at least seven courses numbered above 300. These seven must include at least two seminar courses, at least two linked sequences, and three semester-long courses
distributed between the Algebra and Analysis breadth areas.
Course Requirements for High Honors. All regular course requirements for the mathematics major. In addition, for High Honors, students must take six courses numbered above 300, and complete a fourth-year honors thesis. The six regular courses must include at least two semester courses in the Algebra breadth area, and two semester courses in the Analysis breadth area. Three of the six courses must be seminars.
Note: Exceptions to some of the course requirements for either Honors or High Honors may be possible, for example, for students who participate in the Study Abroad Program. Students considering Honors should consult with the Departmental Honors Program director before leaving for Study Abroad concerning any modifications of these requirements.
GPA Requirements for Honors and High Honors. The average GPA for mathematics courses above the level of Mathematics 136 (or mathematics courses above the level of 136 and computer science courses, for mathematics majors minoring in computer science) must be at least 3.40 at the end of the fall semester of the fourth year.
Fourth-Year Honors Presentation. During the fourth year all Honors majors must give an oral presentation open to the department and majors on an important problem or result. This may be related to their coursework but it is not intended to duplicate material normally in the curriculum. Neither is this intended to be a large-scale project. The goal is to ensure a certain degree of mathematical literacy among the Honors majors.
Fourth-Year Honors Thesis for High Honors. This is a large project extending over the course of the fourth year. The thesis can either consist of original research or be of an expository nature and is written under the guidance of one or more members of the department. This project should entail a significant amount of problem solving. It will culminate in an oral presentation during the spring term of the fourth year, which will be accompanied by a written report of the year's work. Normally, a student will earn one unit in the spring semester of the fourth year for successful completion of an honors thesis unless the thesis work is done as part of the student's participation in a departmental seminar. In the latter case, no extra credit will be given above the credit for the seminar itself. For a particularly extensive project, and with the permission of the Department Chair, a student may earn one unit in each semester of the fourth year for completion of the thesis.

## Computer Science Honors Program

Course Requirements for High Honors. Students must complete all regular course requirements for the computer science major. In addition, for High Honors, students must take six courses numbered above 300 and complete a fourth year honors thesis. This is a large project extending over the course of the fourth year. The thesis can either consist of original research or be of an expository nature and is written under the guidance of one or more member of the department.
GPA Requirement for High Honors. The average GPA for courses in Computer Science must be at least 3.50 at the end of the fall semester of the fourth year.
Advanced Placement Credit: As described above, students with AP credit in mathematics or computer science earn placement in each curriculum and will forfeit that credit if they take a duplicate introductory course(s). AP credit also counts toward the minimum number of courses required for the majors in mathematics and computer science, and the minor in computer science.

## Courses

Mathematics 110 - Topics in Mathematics
Fall, spring
Consideration of diverse subjects in mathematics. Course content varies from semester to semester with specific subject matter for each course announced just prior to enrollment. Designed for non-majors who wish to study mathematics other than calculus. One unit.

Mathematics 125, 126 - Calculus for the Social Sciences 1, 2
Annually
A two-semester introduction to the calculus of one and several variables primarily intended for students majoring in economics. Topics discussed include elementary linear and matrix algebra, differentiation and integration of real valued functions of one real variable, techniques of integration and differentiation, max-min problems and improper integrals. A brief introduction is given to functions of several variables including applications to constrained optimization problems. This is a terminal sequence; students planning to take more than two semesters of mathematics should enroll in Mathematics 131, 132. One unit each semester.

Mathematics 131, 132 - Calculus for the Physical and Life Sciences 1, 2
Annually
Considers the calculus of real-valued functions of one variable for students who are planning further coursework in mathematics or a major in the sciences. Emphasis is placed on a conceptual understanding of the calculus, presenting material from symbolic, numerical, and graphical points of view. The course will make regular use of calculators or computers and will consider a variety of applications to the sciences and social sciences. In the first semester, the concepts of limit, continuity, derivative and integral are developed and applied to algebraic, logarithmic, exponential and trigonometric functions. The second term focuses on the theory and applications of integration, Taylor polynomials and Taylor series, and ordinary differential equations. This course is the prerequisite for Mathematics 241, 242. This course meets four hours per week. One and one-quarter units each semester.
Mathematics 133, 134 - Intensive Calculus for the Physical and Life Sciences 1, 2 Annually This sequence is an intensive version of Mathematics 131, 132 that is designed for students with an interest in pursuing a major in mathematics or the sciences, or the premedical program, who require more class time to make the transition to college-level mathematics. See the description of Mathematics 131, 132 for the course content. This course meets five hours per week. One and one-quarter units each semester.

Mathematics 136 - Advanced Placement Calculus Fall
This course is a one-semester version of Mathematics 131, 132 for those students who have either received one unit of advanced placement credit in calculus or who have taken a year of calculus in high school. See the description of Mathematics 131, 132 for the course content. This course meets four hours per week. One and one-quarter units.

Mathematics 241 - Multivariable Calculus
Fall, spring
A study of the calculus of functions of several variables. The course concerns the theory and applications of differentiation and integration of functions of several variables, vector fields, line integrals, Green's theorem. Prerequisite: Mathematics 132, 134, 136 or the equivalent. This course meets four hours per week. One and one-quarter units.

Mathematics 242 - Principles of Analysis
Fall, spring
An in-depth study of the theory of the calculus of functions of one variable. Topics include sequences, series, continuity, differentiability, the extreme value theorem, the mean value theorem, Riemann integration, and the fundamental theorem of calculus. Prerequisite: Mathematics 241. One unit.
Mathematics 243 - Algebraic Structures
Fall
An introduction to the primary structures in abstract algebra-groups, rings and fields-and the corresponding concept of homomorphism for each of these structures. Emphasis will be placed on using the language of sets, relations, equivalence relations and functions, and developing techniques of proof,
including elementary logic and mathematical induction. Prerequisite: Mathematics 132, 134, 136 or equivalent. One unit.

## Mathematics 244 - Linear Algebra

Designed to acquaint students with the basic techniques of linear algebra. Topics include matrices, vector spaces, subspaces, linear transformations, bilinear forms, determinants, eigenvalue theory, and the finite dimensional spectral theorem. Applications and additional topics are included as time permits. Prerequisite: Mathematics 243 . One unit.

Mathematics 301 - Topics in Geometry
Alternate years
Centers on some area of geometry other than differential geometry. Possible topics include Euclidean and non-Euclidean geometry, projective geometry, the geometry of transformation groups, and the elementary geometry of algebraic curves. Prerequisite: Mathematics 241 and 244. Breadth area: Geometry and Topology. One unit.

Mathematics 302 - Differential Geometry
Alternate years
A first course in the differential geometry of curves and surfaces for students who have completed Mathematics 241 and a semester course in linear algebra. Topics include the Frenet-Serret formulas, smooth surfaces in 3-space, fundamental forms, differentiable manifolds, vector fields, connections and a brief introduction to Riemannian geometry. Prerequisite: Mathematics 241 and 244. Breadth area: Geometry and Topology. One unit.

## Mathematics 303 - Mathematical Models

Alternate years
Introduction to the role of mathematics as a modeling tool, including the construction, interpretation and application of mathematical models. Applications chosen to illustrate various modeling paradigms such as deterministic, probabilistic, discrete and continuous modeling and may include population dynamics, bio-medical applications, stock market analysis, and network and traffic flows. Prerequisite: Mathematics 242 and 244. Breadth area: Applied Mathematics. One unit.
Mathematics 304 - Ordinary Differential Equations
Alternate years
Linear differential equations are studied; basic existence theorems are proved; equations with constant coefficients and series methods are treated in detail. Topics in non-linear systems are discussed, including existence and uniqueness theorems and series methods. Prerequisite: Mathematics 242 and 244. Breadth area: Applied Mathematics. One unit.

Mathematics 305 - Complex Analysis
Alternate years
The fundamentals of complex analysis. Topics include the complex number system, analytic functions, the Cauchy-Riemann equations, Cauchy's integral theorem, Cauchy's integral formula, Taylor series, Laurent series, the calculus of residues and conformal mapping. Prerequisite: Mathematics 242. Breadth area: Analysis. One unit.
Mathematics 351, 352 - Abstract Algebra
Alternate years
An in-depth study of the structure of groups, rings and fields. Depending on the instructor, applications to Galois theory, number theory, geometry, topology, physics, etc., are presented. Prerequisite: Mathematics 244. Breadth area: Algebra. One unit each semester.

Mathematics 357 - Combinatorics
Alternate years
A breadth-first introduction to the subject that discusses a representative sampling of combinatorial problems and general techniques for solving them, including a selection of counting techniques, techniques for existence questions, and a variety of examples. Examples may include partitions, graphs and trees, graph traversals, tournaments, graph coloring and chromatic polynomials, magic squares, Latin rectangles and squares, and combinatorial block designs. Prerequisite: Mathematics 244. Breadth area: Algebra. One unit.

Mathematics 361, 362 - Real and Abstract Analysis
Alternate years
Topological ideas are introduced through a treatment of metric space topology. After the study of open, closed, compact and connected spaces with emphasis on their behavior under continuous mappings, selected topics from functional analysis are considered. These include lim sup and lim inf, relation
of uniform convergence to differentiation and integration, and the Stone Weierstrass approximation theorem. The second semester topics include an introduction to Lebesgue-Stieltjes integration, Hilbert space and other material from linear space theory. Prerequisite: Mathematics 242 and 244. Breadth area: Analysis. One unit each semester.

## Mathematics 363 - Topics in Topology

Alternate years
Considers various aspects of topology of surfaces and solids, including orientability, the Euler number, and the fundamental group. One of the goals of the course is the topological classification of surfaces. Prerequisite: Mathematics 242 and 244. Breadth area: Geometry and Topology. One unit.

## Mathematics 371 - Methods of Numerical Analysis

Alternate years
The numerical solution of problems using computers. Considerable time is devoted to selecting the appropriate algorithm for a given problem and analyzing the resulting numerical errors. Includes such topics as error analysis of computer arithmetic, approximation of functions, solution of equations, numerical integration, numerical solution of ordinary differential equations. The combination Mathematics 371,372 no longer satisfies the full-year linked sequence requirement for the Mathematics major. Prerequisite: Mathematics 242 and 244. Breadth area: Analysis. One unit.

Mathematics 372 - Numerical Linear Algebra
Alternate years
The numerical solution of problems from linear algebra using computers. Gaussian elimination in floating point arithmetic, iterative techniques for solving systems of linear equations, numerical eigenvalue and diagonalization methods. Applications. The combination Mathematics 371, 372 no longer satisfies the full-year linked sequence requirement for the Mathematics major. Prerequisite: Mathematics 242 and 244. Breadth area: Applied Mathematics. One unit.
Mathematics 373 - Principles and Techniques of Applied Mathematics
Alternate years
Provides an understanding of a wide spectrum of phenomena through the use of mathematical ideas, abstractions, and techniques. Topics included are partial differential equations, including the heat and wave equations, Fourier analysis, eigenvalue problems, Green's functions. This course is now offered in a full-year linked sequence beginning with Mathematics 304 (Ordinary Differential Equations). Prerequisite: Mathematics 304. Breadth area: Applied Mathematics. One unit.
Mathematics 374 - Dynamical Systems
Alternate years
An introduction to the theory of discrete dynamical systems. Topics include iteration of functions, graphical analysis, periodic points, stable sets, chaos, symbolic dynamics, the dynamics of functions of a complex variable and the Mandelbrot set. The major theorems will be studied along with their proofs and the computer will be used as a research tool to do experiments which motivate and illustrate the theory. Prerequisite: Mathematics 242 and Mathematics 244. Breadth Area: Applied Mathematics. One unit.

Mathematics 375, 376 - Probability and Statistics
Alternate years
Provides an introduction to the theory and applications of probability and statistics. Topics in probability theory include both continuous and discrete distributions, conditional probability, random variables, expectation, and the Central Limit Theorem. Topics in statistics include maximum likelihood estimation, the sampling distributions of estimators, hypothesis testing, regression analysis, and an introduction to the analysis of variance. Prerequisite: Mathematics 242. Breadth area: Applied Mathematics. One unit each semester.

Mathematics 391, 392 - Seminar
Annually
Provides an opportunity for individual and group investigation of topics not covered in ordinary course work. Active participation on the part of the students is normally required. The subject matter varies to suit individual students and is often related to the research activity of the professor. Examples of areas
of study: Lie groups, functional analysis, complex analysis, probability theory, commutative algebra, applied mathematics, the classical groups, mathematical logic, automata and formal languages, topics in discrete modeling, and qualitative theory of differential equations. A breadth area designation will be made individually for each seminar course by the department chair, in consultation with the faculty member teaching the seminar. Breadth area depends on the subject matter. One unit each semester.

## Mathematics 400 - Directed Reading

Fall, spring
This is an independent reading project for upper division students. Normally this will be on a topic that is not covered by the regular course offerings. Permission of the instructor and the department chair is required for this course. One unit.
Mathematics 495, 496 - Mathematics Honors Thesis
Annually
This is a large project extending over the course of the fourth year. It can consist of original research or be of an expository nature and is written under the guidance of one or more members of the department. Normally, a student will earn one unit in the spring semester of the fourth year for successful completion of an honors thesis, unless the thesis work is done as part of the student's participation in a departmental seminar. In that case, no extra credit is given above the credit for the seminar itself. For a particularly extensive project, and with the permission of the department chair, a student may earn one unit in each semester of the fourth year for completion of the thesis.

## Computer Science Courses

Computer Science 110 - Survey of Computer Science
Fall, spring
This course is a survey of the science and art of computing intended for students not majoring in mathematics or science. Half of the course is an introduction to computer programming. Emphasis is placed upon language-independent topics such as structured programming, good programming style, the use of subprograms, and algorithm construction in general. The other half of the course explores how computers are built, how they operate, and what their fundamental limitations are. A portion of the course will be devoted to technical and ethical risks, problems, and disasters. One unit.
Computer Science 131 - Techniques of Programming
Fall
An intensive introduction to object-oriented programming in a high-level language for students considering further course work in computing or students majoring in mathematics, the sciences, economics or any other field in which computer programming plays a role. It is expected that most of the class will continue with Computer Science 132, Data Structures. There is a required weekly lab meeting of this course. One and one-quarter units.
Computer Science 132 - Data Structures
Spring
This course introduces standard data structures such as stacks, lists, trees, and graphs. Algorithms and techniques for sorting, searching, graph traversal, hashing, and recursion are discussed. Analysis of algorithms and special topics are covered as time allows. There is a required weekly lab meeting of this course. Prerequisite: Computer Science 131, or equivalent. One and one quarter units.
Computer Science 135 - Discrete Structures
Spring
An introduction to the discrete mathematical structures that form the basis of computer science. Topics of study include proof techniques, relations and functions, set theory, Boolean algebra and propositional logic, predicate calculus, graphs, trees, induction and recursion, counting techniques and discrete probability. It is recommended this class be taken concurrently with Computer Science 132. One unit.
Computer Science 226 - Computer Systems and Organization
Fall
This course covers fundamental topics related to the design and operation of a modern computing system. Relationships are drawn between circuits and system software. Topics include hardware and software organization, virtual machines, physical fundamentals of transistors, digital logic design, memory system organization, architecture and management, CPU design, multiprocessors, data representation, machine language, microprogramming, assembly language, assemblers and linkers, CISC versus RISC, interrupts
and asynchronous event handling, networking, and the past and present of computer system design, architecture, and organization. Prerequisite: Computer Science 132. One unit.
Computer Science 235 - Analysis of Algorithms
Alternate years in fall
This course provides an introduction to the design and analysis of fundamental algorithms and their complexity. We will present several algorithm design strategies that build on the data structures and programming techniques introduced in Computer Science 132. The general techniques covered will include: Divide-and-conquer algorithms, dynamic programming, greediness and probabilistic algorithms. The topics will include: sorting, searching, graph algorithms, O-notation, and introduction to the classes P and NP, and NP-completeness. Prerequisite: Computer Science 132 and Calculus or permission of instructor. One unit.
Computer Science 324 - Programming Languages Design and Implementation
Spring
Principles for designing and implementing programming languages are presented as well as styles and features that encourage and discourage the writing of good software. Specific topics include language syntax and semantics, comparison of language features and their implementation, methods of processing a program, establishing the run-time environment of the program and the major programming language paradigms (the imperative/procedural, functional/applicative, declarative/logic and object-oriented paradigms). Prerequisite: Computer Science 226. One unit.

Computer Science 328 - Ethical Issues in Computer Science
Alternate years in fall
This course will examine the ethical issues that arise as a result of increasing use of computers, and the responsibilities of those who work with computers, either as computer science professionals or end users. The course will stress the ways in which computers challenge traditional ethical and philosophical concepts, and raise old issues in a new way. Students will be expected to: read and understand the ideas in the readings; explain the ideas; analyze issues and see them from diverse perspectives; and formulate and critique arguments. The readings will include technical issues in computer science and may focus on a particular area such as software design as well as more traditional topics such as philosophical theories (e.g. ethical relativism, utilitarianism, deontological theories, rights and virtue ethics), privacy, intellectual property rights and proprietary software, security, accountability, liability, the digital divide, hacking, and viruses.

There are several course goals: (1) to give a fuller, richer, deeper understanding of the social impact of computers and the ethical issues in human activities affected by computers, (2) to prepare the student for living in a computerized world and perhaps working as a professional in the computing field, and (3) to improve presentation, debating and writing skills. Prerequisite: Computer Science 132. One unit.

Computer Science 343 - Computer Graphics
Alternate years
This course offers a survey of topics in computer graphics with an emphasis on fundamental techniques and the theory underlying those techniques. Topics include the fundamentals of two and three dimensional graphics such as clipping, windowing, and coordinate transformations (e.g., positioning of objects and camera), raster graphics techniques such as line drawing and filling algorithms, hidden surface removal, shading, color, curves and surfaces and animation. Students learn how to program graphics displays using a state of the art computer graphics package. Prerequisite: Computer Science 132 and Calculus or permission of instructor. One unit.
Computer Science 345 - Theory of Computation
Alternate years
Basic aspects of regular, context-free, context sensitive and unrestricted grammars, propositional and predicate calculus, recursive functions, automata theory and computational complexity. Prerequisite: Computer Science 132. One unit.

Computer Science 363 - Computational Vision
Alternate years
This course offers an introduction to the algorithms underlying machine and biological visual systems. It examines the processes involved in converting a 2 -dimensional image to a 3-D representation of
the physical world. Computational models of visual processing will be compared to physiological and psychophysical results from human and other biological visual systems. The topics covered include: edge detection, stereopsis, motion computation, shape from shading, color and object recognition. Prerequisite: Computer Science 132 and Calculus, or permission of the instructor. One unit.

Computer Science 364 - Compiler Construction
Alternate years
The theories, tools and techniques for translator creation are the focus of the course. Topics include: regular expressions, grammars, finite state machines, lexical analysis, parsing, linguistic approaches to problem solving, intermediate code trees, register allocation, code generation, a variety of optimization schemes and techniques as well as Unix support for translation such as lex and yacc. An essential and distinguishing feature of the course is the project requirement. Students are required to build a working compiler which is a large software engineering project of significant complexity. This course carries the project course designation. Prerequisite: Computer Science 324 or permission of the instructor. One unit.

Computer Science 399 - Topics in Computer Science
Alternate years
This course gives the student a chance to see the principles introduced in earlier courses applied in specific areas and it gives faculty an opportunity to teach material of special interest to them. The most likely topics are artificial intelligence, database systems, advanced theory of computation, and robotics. Prerequisite: varies by topic. One unit.
Computer Science 400 - Directed Reading
Fall, spring
This is an independent reading project for upper division students. Normally this will be on a topic that is not covered by the regular course offerings. Permission of the instructor and the Department Chair is required for this course. One unit.
Computer Science 491-492 - Computer Science Honors Thesis
Annually

## Modern Languages and Literatures

Isabel Alvarez Borland, Ph.D., Professor
John T. Cull, Ph.D., Professor
Ambroise Kom, Dr. d'Etat ès lettres, Eleanor Howard O'Leary Chair, Professor
Claudia N. Ross, Ph.D., Professor
Constance G. Schick, Ph.D., Professor
Amy Singleton Adams, Ph.D., Associate Professor
Susan Amatangelo, Ph.D., Associate Professor
M. Estrella Cibreiro-Couce, Ph.D., Associate Professor

Laurence Enjolras, Ph.D., Associate Professor
Francisco Gago-Jover, Ph.D., Associate Professor and Chair
Cynthia L. Stone, Ph.D., Associate Professor
Jorge H. Valdés, Ph.D., Associate Professor
Josep Alba-Salas, Ph.D., Assistant Professor
Daniel Frost, Ph.D., Assistant Professor
Stephen A. Shapiro, Ph.D., Assistant Professor
Paola Marconi, Ph.D, Assistant Professor
Sylvia Schmitz-Burgard, Ph.D., Assistant Professor
Denise-Renée Barberet, Ph.D., Visiting Assistant Professor
Maria L. Gomez Ramirez, Ph.D., Visiting Assistant Professor
Baozhang He, Ph.D., Visiting Assistant Professor
Dana B. Simpson, Ph.D., Visiting Assistant Professor
Liliane Duséwoir, M.A., Visiting Instructor
Claire Gallou, Cand. Ph.D., Visiting Instructor
Anna Guillemin, Cand. Ph.D., Visiting Instructor
Patrizia Rodomonti, M.A., Visiting Instructor
Dennise Scott, M.S., Visiting Instructor
Janine Fuller Hess, Ph.D., Lecturer
Ginger M. Leon, M.Ed., Lecturer
Esther L. Levine, M.A., Lecturer and Assistant Dean
Rose Mambert, M.A., Lecturer
Olga S. Partan, Ph.D., Lecturer
Helen Freear, Ph.D., Lecturer, Liaison - Foreign Language Assistants Program
Mary Morrisard-Larkin, Cand. Ph.D., Coordinator of Placement Testing
Elizabeth O'Connell-Inman, M.A., Lecturer, Coordinator of Directed Independent Spanish Courses
The courses offered by the Department of Modern Languages and Literatures provide a rich means for the intellectual and aesthetic development of Holy Cross students through the study of foreign languages, literatures, and cultures. Foreign languages lie at the very heart of the broader liberal arts curriculum and language study is a vehicle for the understanding of the cultural worldview of speakers of other languages. As such, it plays a key role in the multicultural or cross-cultural dimension of all majors and concentrations, and is an integral part of such concentrations as Asian Studies, Deaf Studies, German Studies, Latin American and Latino Studies, and Russian and Eastern European Studies.

The department offers courses in American Sign Language (ASL), Chinese, French, German, Italian, Russian, Spanish and foreign literatures in translation. Major programs are offered in French, German, Italian, Russian and Spanish. Minor programs are offered in French, German, Italian, and Russian. Students have also used the department's language and literature courses in the CISS-sponsored concentrations and student-designed multidisciplinary majors and minors. See the descriptions for each in the section of this Catalog entitled Center for Interdisciplinary and Special Studies.

Department advisors for majors and minors help students become aware of the College's many academic opportunities and assist them with their individual curriculum. Classroom instruction in the languages is complemented by small-group practice with native foreign-language assistants and through the use of state-of-the-art facilities in the Multimedia Resource Center. Co-curricular activities are provided by language tables, language clubs, honor societies, film series, lectures and cultural outings.

The department also offers a major program in Studies in World Literatures. Courses are conducted in English and employ translated texts. The program is designed to introduce students to the most representative works of various national literatures while highlighting the commonalities and differences among these works. Courses instruct students in approaches to textual interpretation and criticism, as well as guide them toward an understanding of the cultural themes reflected in the respective works.

All students, and modern-language majors in particular, are encouraged to avail themselves of study abroad opportunities which strengthen language skills and cultural understanding. The College has its own programs at sites in Cameroon, China, France, Japan, Italy, Mexico and Spain, and also regularly sends students to programs in Germany, Austria, and Russia.

All Holy Cross students must satisfy the College's Common Area Requirement for language study (the "G" requirement). This requirement is satisfied by two consecutive semesters of language study. Students who wish to satisfy this requirement by continuing the study of a language must begin their study at the level in which they are placed by the College's placement procedures. A score of 4 or 5 in the Advanced Placement exam for a particular language satisfies one semester of this two-semester Common Area requirement provided the student continues the study in that language at Holy Cross for at least one additional semester. Students who wish to satisfy the requirement with a language which they have not previously studied can do so with two semesters of the elementary level of a language.
Advanced Placement Credit: Students with AP credit in a modern language or literature earn placement in the curriculum but not progress toward the minimum number of courses required by the major. Students who take a course that duplicates the AP award in a language will forfeit the AP credit. Students with AP credit in the literature of a modern language will not be permitted to enroll in a course below the 300 level.

## American Sign Language and Deaf Studies

In 1994, through the support of a grant from the 3M Foundation's VISION Program, the College introduced an American Sign Language (ASL) and Deaf Studies curriculum. Courses, offered through the Modern Languages and Literatures Department, include Introduction to Deaf Studies, two to six semesters of American Sign Language instruction, special topic courses that are offered on rotating years (such as The Deaf Community: Language and Culture, Deaf Literature, Linguistics of ASL) and an internship seminar class with full immersion into the Deaf community. The Intermediate and Advanced ASL classes include a concurrent Community-Based Learning partnership experience using ASL. Students are actively involved in programs that provide personal and direct interaction with members of the Deaf community. The Deaf Studies program also offers students numerous co-curricular events including speakers, special events, workshops, and films that complement and extend the language and culture of the Deaf community. Students who complete the required courses in the Deaf Studies Program are awarded a certificate of completion in Deaf Studies.

Students also have the opportunity to develop a multidisciplinary major or minor by incorporating Deaf Studies with other disciplines within the College. Approved areas of multidisciplinary majors incorporating Deaf Studies include Social Issues in Deaf Education, Genetics and the Deaf Community: Attitudes of Deaf College Students Towards Genetic Testing, Prenatal Screening and Gene Therapy, Development of Literacy Skills for deaf children.

Typically students studying other languages have the opportunity to study abroad in the foreign country rich in culture and language. Students at Holy Cross who are interested in Deaf Studies can also study in an environment rich in the language and culture of Deaf people. Through the Semester Away program students link their learning and living by attending Gallaudet University, the world's only deaf
university, located in Washington, D.C.
Deaf Studies 109 - Introduction to Deaf Studies
Fall
American Sign Language is the second most widely used language in the U.S. It is similar to other spoken languages in many ways (has its own structure, grammar, etc.) but is a visual language. Another distinguishing difference is the perception that many individuals have of the use of this language and of the people who communicate with sign. The issues relating to deafness, deaf people and Deaf community are addressed from a cultural, linguistic, and minority perspective rather than a medical view. Readings, discussions and personal accounts shared by members from the community address the opposing views- the medical perception and the cultural/linguistic view. Is deafness something to be "fixed" or is it something to be celebrated? This course takes advantage of alternative ways at looking at members in our society who might be "different." Attention is given to understanding various methods that are appropriate for studying the cultural differences between the Deaf world and the Hearing world and how this parallels with other ethnic and cultural groups. The students are challenged to learn and think about how this majority view (of hearing people) influences opinions, decisions, and policies for Deaf people. This type of learning raises the students' awareness to significant issues involving other minority groups of cross-cultural analysis and hopefully provides a motivation for them not only to understand their own cultural identity and beliefs, but also to want to influence the future in a more positive and just way. Introduction to Deaf Studies is open to all students with priority given to those students enrolled in the Deaf Studies certificate program. Students enrolled in the Deaf Studies Certificate program can take this course prior to taking an ASL class or concurrently with any of the first four semesters of ASL. One unit.
Deaf Studies 101 - Elementary American Sign Language 1 Fall Introduces students to the basic expressive and receptive skills in ASL, including conversation strategies, spatial referencing and facial expressions. Questions, commands, and simple sentences will be covered, leading to basic conversational skills in ASL. Awareness of Deaf culture is included. Attendance in ASL lab practicum is required in addition to the class time. One and one-quarter units.
Deaf Studies 102 - Elementary American Sign Language 2
Spring
Continues to develop the basics of the ASL language and the building of both expressive and receptive vocabulary. It further develops the communicative competencies in the language focusing on skills including use of classifiers, temporal sequencing, spatial agreement and object identification through description. Study of Deaf culture is continued. Attendance in ASL lab practicum is required in addition to the class time. One and one-quarter units.

Deaf Studies 201 - Intermediate American Sign Language 1
Fall
A continuation of the Elementary ASL level. Focus is on increasing the students' vocabulary in ASL and use of the correct grammatical structure of the language. Further exposure to more sophisticated dialogue is presented. Improving competency in both visual and receptive ASL skills in social situations and increased understanding of Deaf culture is better understood through interaction with members of the Deaf community. In addition to the class time, students are required to participate in a Community Based Learning partnership program where ASL is used. Assignments are videotaped and used for student evaluations. One unit.
Deaf Studies 202 - Intermediate American Sign Language 2
Spring
A continuation of the Intermediate ASL 1, but with more depth in the discussion of the principles of ASL. Emphasizes receptive and expressive skills in the areas of grammatical structure, vocabulary, finger spelling, numbers, and non-manual markers. All lab work, social events, videotapes, learning stimulating activities (in and outside of class) and assignments are intended to develop intermediate competency in receptive and expressive use of ASL. In addition to the class time, students are required to participate in a Community Based Learning partnership program where ASL is used. Assignments are videotaped and used for student evaluations. One unit.

Deaf Studies 203 - Deaf Literature
Alternate years
Examines how culture and language intersect in 20th-century ASL literature. Explores the origins of deaf literature, its relationship with written literature, especially its effect on the development of aesthetic expression for ASL literature. Considers works about deafness and works written by deaf authors and the various attitudes toward deafness revealed in these works. Emphasis will be placed on historical background, meaning of the content, discussion of grammatical features and styles revealed in the study of selected videotapes. This course is taught primarily in ASL. One unit.
Deaf Studies 300 - The Deaf Community: Language \& Culture
Alternate years
Provides students with a positive perspective on Deaf people who use American Sign Language and their cultural identity. The course is based on a cultural perspective as an alternative to the pathological model and explores the historical evolution of the Deaf Community in terms of language, self-image, culture and arts. This course is taught in ASL. One unit.

## Deaf Studies 301 - Experience in the Deaf Community: Internship Seminar

Spring
Offers students a unique learning experience, a weekly practicum seminar, and a work experience/internship opportunity for the semester. Students integrate the hands-on experience of their internship sites with related readings, information from guest speakers, classroom discussions and student presentations of specific topics. Students do specific research in an area of interest to them and make a formal presentation to the class, as well as submit a written paper. One unit.
Deaf Studies 299 - Special Topics
Annually
A special topics course will be offered on alternate semesters and will include related areas in literature, linguistics, culture or visual communication. Topics vary with each offering and can be used for completion of the Deaf Studies Certificate.

## Chinese

Students may elect a multidisciplinary major in Asian Studies through CISS with a focus on Chinese language and civilization. Ten courses are required including Perspectives on Asia (History 103 or 104), four courses in Chinese language above the elementary level, one course in Chinese History, four nonlanguage courses with a China focus from at least two different disciplines. Also available is a "China Track" within the Asian Studies Concentration administered by CISS. Requirements include three semesters of Chinese above the elementary level, Perspectives on Asia (History 103 or 104), and two non-language courses on China.
Study Abroad: Students are encouraged to participate in the Holy Cross spring semester program in Beijing. Prerequisite: three semesters of Chinese.
Chinese 101, 102 - Elementary Chinese 1, 2
Annually
An introduction to spoken Mandarin and written Chinese. Providing a foundation in speaking, listening, reading, writing, and communication skills, and an introduction to the Chinese cultural world view and the way that it informs human behavior. Five class hours weekly. One and one-quarter units each semester.

Chinese 201, 202 - Intermediate Chinese 1, 2
Annually
Continued focus on the development of oral and written communication skills and on the strengthening of cultural competency in Chinese through the use of written texts and multimedia resources. Five class hours weekly. One and one-quarter units each semester.

Chinese 255 - Chinese Culture Through the Camera's Eye
Alternate years
An exploration of Chinese culture through 20th- and 21st-century Chinese cinema. Taught in English.
One unit.

Chinese 301, 302 - Third-Year Chinese 1, 2
Annually
Continued focus on the development of oral and written communication skills and cultural competency through the use of traditional Chinese stories and multimedia resources. Five class hours weekly. One and one-quarter units each semester.

Chinese 199, 299, 399 - Topics
Annually
Offerings on aspects of Chinese literature and culture. One unit.
Chinese 401, 402 - Fourth-Year Chinese 1, 2 Annually Continued development of oral and written communication skills and cultural competency through the use of readings, videos, and other multimedia resources. One unit each semester.
Chinese 409, 410 - Introduction to Literary Chinese 1, 2
Alternate years
An introduction to the classical literary language of China. One unit each semester.

## French

French major requirements: a minimum of 10 courses at the intermediate level or above, including the following:

- French 301 (Composition and Conversation)
- At least two courses must be at the 400 level.
- At least two courses must be taken in the fourth year.

Majors are urged to seriously consider spending their third year at one of Holy Cross' two sites in France, the University of Bourgogne in Dijon or the University of Strasbourg or at its site in Cameroon.
French minor requirements: a minimum of six courses in French, at the intermediate level or above. Required course for the minor: French 301 (Composition and Conversation). All other courses above French 301 normally approved for the major qualify for the minor, with prerequisites applying as stipulated. French courses taken in the Study Abroad programs count toward the minor; however, minors who study abroad will be required to take at least three courses at Holy Cross including at least one in their fourth year.
French 101, 102 - Elementary French 1, 2
Annually
Designed for students with no previous study of French for acquisition of a basic speaking, reading, and writing knowledge of idiomatic French. Five class hours weekly. One and one-quarter units each semester.

## French 201, 202 - Intermediate French 1, 2

Annually
A review of the fundamentals of the language supplemented by reading of literary and cultural material and by practice in oral expression. For students who have completed French 102. Four class hours weekly. One unit each semester.
French 232 - Moulin Rouge: Intersections of Art \& Popular Culture
Every third year
An interdisciplinary exploration of Paris at the turn-of-the-century. The myth of France's "La Belle Époque" often portrays Paris in terms of the capital of a pleasure-seeking-and-driven consumer society. By examining the avant-garde and the modernist art of the period, the course will investigate the role of art and of the artist in society. It also aims to be the occasion for an appreciative look at the immense and profound artistic creativity that distinguishes the time and place of this belle époque. Works by Apollinaire, Baudelaire, Colette, Jarry, Rimbaud, Rostand, (Henri) Rousseau, Toulouse-Lautrec, Zola. Conducted in English. Does not count for French major or minor credit. One unit.
French 301 - Composition and Conversation
Fall, spring
Designed for gaining proficiency in oral and written French. Emphasis on developing correctness and fluency in everyday situations. Regular methods of instruction include dictation, phonetic transcriptions, discussions, debates, compositions and lab exercises. Required for French majors and recommended for first-year students with advanced placement. Prerequisite: French 202 or the equivalent. Four class hours weekly. Conducted in French. One unit.

## French 302 - Approaches to Reading and Writing

Every third year
Aims to familiarize students with methods for the critical analysis of a variety of texts. It also further develops students' oral and written skills. Prerequisite: French 301. Conducted in French. One unit.
French 311 - French Life \& Letters: Middle Ages to 1800
Every third year
An overview of French life and letters from the Middle Ages to 1800 . Focus is on literature, but other types of cultural material are included to provide insights into the cultural, historical, and ideological contexts. Prerequisite: French 301. Conducted in French. One unit.

French 312 - French Life \& Letters: the 19th, 20th and 21st Centuries Every third year An overview of French life and letters from 1800 to the present. Focus is on literature, but other types of cultural material are included to provide insights into the cultural, historical, and ideological contexts. Prerequisite: French 301. Conducted in French. One unit.

## French 399 - Special Topics

Fall, spring
Designed to give students the tools to read and write critically in the target (foreign) language. A thematic topic will be the focus of the course, and a variety of texts representative of all major genres (poetry, play, short story, novel) will be examined. Writing exercises include le résumé, le commentaire, la dissertation, l'exposé oral. Prerequisite: French 301. Conducted in French. One unit.

## French 401 - Advanced French

Every third year
Designed for students who seek to reach an advanced level of proficiency in French. The four skills will be stressed. Particular emphasis will be put on exercises that illustrate language as a system. Four class hours weekly. Prerequisite: A minimum of two French courses at the 300 -level. Conducted in French. One unit.

## French 402 - Translation

Every third year
Through the translation of selected passages, seeks to teach students to write with precision and clarity in both French and English. Prerequisite: A minimum of two French courses at the 300 level. Conducted in French. One unit.

French 403 - Syntax
Every third year
An appreciation of the structure of the French sentence through two types of analyses: analyse grammaticale and analyse logique. Prerequisite: A minimum of two French courses at the $300-\mathrm{level}$. Conducted in French. One unit.

## French 413 - Seminar: French Poetry

Every third year
A critical study of French prosody and poetic practice with an analysis of poetical works drawn from Villon to the present. Prerequisite: A minimum of two French courses at the 300 -level. Conducted in French. One unit.

French 421 - French Literature from the Middle Ages to the Renaissance Every third year A critical study of the major works and authors of the Middle Ages (including La Chanson de Roland, Chrétien de Troyes, Le Roman de Renart, La Farce de Maitre Pathelin, Villon), and the major poets and prose writers of the Renaissance (including Rabelais, Du Bellay, Ronsard, Montaigne). Prerequisite: A minimum of two French courses at the $300-\mathrm{level}$. Conducted in French. One unit.
French 422 - The Classical Theater and Its Aftermath
Every third year
Representative dramatic works of the 17 th and 18th centuries are studied against the backgrounds of the dramatic theory from which they spring. The plays of Corneille, Molière and Racine are featured. Prerequisite: A minimum of two French courses at the 300-level. Conducted in French. One unit.

## French 423 - 18th-Century French Literature

Every third year
An examination of the literature of the period as it relates to the changing social, intellectual and literary values that led to the French Revolution and its consequences. Authors treated include Beaumarchais, Saint-Pierre, Laclos, Lesage, Marivaux, Prévost, Montesquieu, Rousseau, Diderot, Sedaine, Voltaire. Prerequisite: A minimum of two French courses at the 300-level. Conducted in French. One unit.

A close examination of the French novel from 1800 to 1900, including such authors as Constant, Stendhal, Balzac, Flaubert, Maupassant, Huysmans, and Zola. Prerequisite: A minimum of two French courses at the 300 -level. Conducted in French. One unit.

## French 425 - From Realism to Impressionism and Symbolism

Every third year By focusing on French literary and artistic developments of the second half of the 19th century, this course examines the paradoxical link between the attempt to express or represent reality and the emergence of a symbolist and even an abstract aesthetics. Works by Baudelaire, Bizet, Cézanne, Debussy, Degas, Flaubert, Jarry, Manet, Monet, Maupassant, Rimbaud, Rodin, Toulouse-Lautrec, Verlaine, and others, are discussed. Prerequisite: A minimum of two French courses at the 300-level. Conducted in French. One unit.

## French 426 - 20th-Century Theater

Every third year
The major trends and theories in the theater of this century are considered. The reading begins with examples of important 19th-century plays and continues to the modern period. Authors treated include Giraudoux, Beckett, Ionesco and others. Prerequisite: A minimum of two French courses at the 300level. Conducted in French. One unit.

## French 427 - 20th-Century Novel

Every third year
The major trends and theories by prominent 20th-century novelists are considered. Selected works by authors such as Gide, Proust, Mauriac, Sartre, Colette, Camus, Breton, De Beauvoir, Beckett, Bernanos, Giono, Vian, Queneau, Perec, Pagnol, Tournier, Robbe-Grillet, Sarraute, Duras, Hyvrard, Modiano, Sollers, Lainé, Wittig, Roche, Yourcenar, Leduc, Ernaux, Angot, Germain and others. Prerequisite: A minimum of two French courses at the $300-\mathrm{level}$. Conducted in French. One unit.

## French 431 - Contemporary France

Every third year
Focuses on current issues in contemporary France. Politics, society, the arts, domestic and international affairs, education, the media, feminism, etc., are among the topics analyzed and discussed. Prerequisite: A minimum of two French courses at the $300-\mathrm{level}$. Conducted in French. One unit.

French 432 - Moulin Rouge: Intersections of Art \& Popular Culture
Every third year
An interdisciplinary exploration of Paris at the turn-of-the-century. By examining the avant-garde and the modernist art of the period, the course investigates the role of art and of the artist in society. Works by Apollinaire, Baudelaire, Colette, Jarry, Rimbaud, Rostand, (Henri) Rousseau, Toulouse-Lautrec, Zola. Prerequisite : a minimum of two French courses at the 300-level. Conducted in English. One unit.
French 441 - Francophone Cross-Culturalities \& Creolizations Every third year
A general introduction to the cultures outside France-in particular, those of America and Africa-that identify themselves as Francophone. Colonialism and post/neo-colonialism, the creation of new cultural identities and expressions from ethnic diversity, linguistic "variants" and marginalizations are among the topics analyzed and discussed. Prerequisite: A minimum or two French courses at the $300-\mathrm{level}$. Conducted in French. One unit.

## French 451 - French Women Writers

Every third year
An examination of the works of major contemporary French women writers. Selected works by authors such as Colette, De Beauvoir, Yourcenar, Leduc, Duras, Ernaux, Wittig, Hyvrard, Chawaf, François, Susini, Cixous, Sallenave, Redonnet, Lenoir, Angot, Bernheim, Germain, Detambel, Lê, Bouraoui and others. Prerequisite: A minimum of two French courses at the $300-\mathrm{level}$. Conducted in French. One unit.

French 461 - Writing Madness in Africa
Every third year
The concept of madness varies from one culture to another. It may be seen as a mystical, spiritual,
primitive or creative experience. Depending on the society, madness raises psychological, sociological, philosophical and political issues at the same time. A human being is supposed to be rational but madness is seen as the "other," the universe of irrationality. Perception of madness in Africa may be very different from that of the West. In the colonial context, African, the native is perceived as the "other," the primitive, whereas the native also looks at the occupant, the European as the "other," a strange being. In modern African writing, madness may be represented from the conflict between the world views that leads to such a cultural production. Prerequisite: A minimum of two French courses at the 300 -level. Conducted in French. One unit.

## French 499 - Special Topics

Fall, spring
A special course offered either semester for the study of a literary genre, form, theme or problem. Under this heading, courses in film and in African and Caribbean Literatures and Cultures are offered regularly. Conducted in French. One unit.

## French 491, 492 - Tutorial

Annually
Eligible students may elect one or both of these courses with the permission of the department chair. Tutorials are normally offered only to students who have previously taken all other advanced courses offered in a given semester. One unit each semester.

## German

German major requirements: a minimum of 10 courses at the intermediate level and above. German majors are required to complete successfully German 301, 303, and 304. Majors are encouraged to enhance their knowledge of German thought and culture through allied courses in art, history, philosophy and political science. Majors who spent their third year abroad are required to take at least one course at Holy Cross in their fourth year.
German minor requirements: a minimum of six courses at the intermediate level and above. German minors are required to complete successfully German 301 and German 303 or 304. Minors who spend their third year abroad are required to take at least three courses at Holy Cross including one in their fourth year.
German Studies major: offered through the Center for Interdisciplinary and Special Studies (for details see CISS, Student-Designed Multidisciplinary Majors). The aim of the German Studies major is to develop an understanding of the cultural, social, and political life of the German-speaking peoples in their historical and international context.

## Requirements:

- 2 courses in Intermediate German
- 1 course German Composition \& Conversation
- 2 courses in German Culture/Literature
- 1 course on History
- 4 elective courses from German, History, Music, Philosophy or Religion


## German 101, 102 - Elementary German 1, 2

Annually
Designed for students with no previous study of German, aimed at the acquisition of a basic speaking, reading and writing knowledge. Five class hours weekly and laboratory practice. One and one-quarter units each semester.

German 201, 202 - Intermediate German 1, 2
Annually
A review of the fundamentals of the German language, supplemented by readings in literary and cultural texts as well as practice in oral and written expression. Prerequisite: German 102 or the equivalent. Five class hours weekly and laboratory practice. One and one quarter units each semester.
German 250 - Metropolis Berlin
Every third year
The city of Berlin represents a microcosm of change and growth in European society yet maintains a
unique identity. Its development from a royal city to the capital of a united Germany will be examined through the lenses of literature, film, art, and architecture. In English. One unit.
German 251 - German Resistance to Hitler
Every third year
Explores the various forms of German resistance to Hitler during the Third Reich (1933-1945) and discusses the difficulties such opposition faced in a totalitarian regime. Against the backdrop of the Hitler dictatorship the many forms of resistance in the Third Reich are discussed, ranging from a whispered joke to a full-fledged coup d'état in 1944 by the Stauffenberg circle. In English. One unit.
German 252 - From Weimar to Hitler: German Culture and Politics from 1918 to 1945 Every third year The turbulent 14 years of the Weimar Republic (1919-1933) and the 12 years of the Third Reich (19331945) are the focus. Though politically unstable, the Weimar Republic witnessed an unprecedented cultural flowering and the first truly modern culture. The second part of the course deals with the Third Reich-a period of political repression, cultural regimentation, a destructive war and the Holocaust. In English. One unit.

German 253 - Nazi and Postwar German Cinema Alternate years Films produced during the Third Reich played a crucial role in the mass culture of that regime. The course examines selected films made during that time as well as cinematic representations of the Hitler years during the postwar period to show how German film makers tried to come to terms with the Nazi past of their country. In English. One unit.
German 301 - German Composition and Conversation Fall
Designed for students wishing to acquire proficiency in spoken and written German. Discussions of problems dealing with German culture and students' daily concerns and interests. Weekly oral and written assignments with grammar review as necessary. Required for German majors and recommended for first-year students with advanced placement. Prerequisite: German 202 or the equivalent. In German. One unit.

German 303 - German Culture: 1750-1890
Alternate years in spring
An introduction to outstanding examples of German thought, art, and cultural developments in the 18th and 19th centuries. Important German cultural figures such as Frederick the Great, Goethe, Beethoven, Nietzsche and Marx are discussed. Readings, lectures, and discussions in German. Prerequisite: German 202 or the equivalent. One unit.

German 304 - German Culture: The 20th Century
Alternate years in spring
An introduction to political and cultural developments in Germany in the 20th century. Aspects of the Weimar Republic, the Third Reich, East and West Germany, and the United Germany are studied. Readings, lectures, and discussions in German. Prerequisite: German 202 or the equivalent. One unit.

German 401 - Goethe and Schiller
Every third year in spring
Analysis of representative works of Lessing, Goethe, Schiller and their contemporaries within the context of the German Enlightenment and German Idealism and their major philosophical, aesthetic and moral concerns. Readings and discussions in German. Prerequisite: German 202 or the equivalent. One unit.

## German 402 - German Romanticism

Every third year in spring
A study of selected Romantic writings against the background of related developments in the arts and in philosophy. Analysis of works by Tieck, Novalis, Brentano, Eichendorff, Hölderlin, E.T.A. Hoffmann and others. Readings and discussions in German. Prerequisite: German 202 or the equivalent. One unit.

German 403 - 19th-Century German Literature
Every third year in spring
A study of German literature in the age of burgeoning industrialism and materialism, extending from the late romanticism through the era of realism. Works of representative authors such as Heine, Büch-
ner, Grillparzer, Droste-Hülshoff, Stifter, Keller, Meyer and Fontane. Readings and discussions in German. Prerequisite: German 202 or the equivalent. One unit.
German 404 - Modern German Theater
Every third year in fall
Analysis of the major movements and playwrights of modern German theater studied against their historical and ideological background. Readings of works by Hauptmann, Kaiser, Schnitzler, Hofmannsthal, Brecht, Frisch, Dürrenmatt, Weiss and others. Readings and discussion in German. Prerequisite: German 202 or the equivalent. One unit.

## German 405 - Kafka, Hesse, Mann and Their Contemporaries Every third year in fall

 Introduction to the most significant masters of German prose in the first half of the 20th century. Works of representative writers such as Hauptmann, Schnitzler, Mann, Kafka, Hesse, Brecht. Readings and discussions in German. Prerequisite: German 202 or the equivalent. One unit.German 406 - Contemporary German Literature
Every third year in fall
A study of the literature written in German after World War II reflecting experiences of life as seen by representative authors of the Federal Republic of Germany, the German Democratic Republic, Switzerland, Austria and the newly unified Germany. Selected works by Borchert, Grass, Böll, Frisch, Christa Wolf, Dürrenmatt, Plenzdorf, Handke and Biermann. Prerequisite: German 202 or the equivalent. One unit.

German 461, 462 - Special Topics in German Literature and Culture Alternate years Intensive study of a special aspect of German literature such as themes, genres or movements. Topics announced in the preceding semester. Given in German or English according to staff decision. Recent topics: Brecht and the Political Theater, European Romanticism, Existentialism in German Literature. One unit each semester.

German 491, 492 - Third-Year Tutorial
Annually
Eligible third-year students may elect German 491, 492 with permission of department chair and instructor. Topics to be determined by instructor. Recent topics: Modern German Drama, East German Literature. One unit each semester.

German 493, 494 - Fourth-Year Tutorial
Annually
Eligible fourth-year students concentrating in German may elect German 493, 494 with permission of department chair and instructor. Recent topics: Bertolt Brecht, The Literature of the Third Reich, East German Fiction, Thomas Mann, the "Wall" in East and West German Literature, Theodor Fontane. Topics to be determined by instructor. One unit each semester.

## Italian

Italian major requirements: the major consists of a minimum of 10 courses in Italian language, literature and culture beyond the elementary level and includes the following courses:

- Intermediate Italian (Italian 201, Italian 202) (2 semesters)
- Composition and Conversation (Italian 301)
- Dante (Italian 260)
- One course in Medieval and/or Renaissance literature (Italian 411)
- One course in 19th-and/or 20th-century literature (Italian 257, Italian 419, Italian 420)

The remainder of the courses taken to fulfill the major requirements may include any combination of the other courses offered by the Italian section such as cinema, Special Topics, and tutorials (taken either during the third or fourth year of study). Students may also take a maximum of two courses in English; these courses may include Italian courses taught in translation or approved courses in related departments such as History, Music and Visual Arts.

Students who choose to major in Italian are strongly encouraged to study abroad. Of the courses taken in Florence, Italy, four courses may be applied to the major. Certain courses taken abroad may be accepted as the equivalent of the specific requirements listed above. Those students who spend their
third year in Italy may declare the major during the first semester of their fourth year.
All students who major in Italian are required to take two courses in their fourth year.
The requirements for the Italian minor consist of a minimum of 6 courses in Italian language, literature and culture beyond the elementary level and includes the following courses:

- Intermediate Italian (Italian 201, Italian 202) (2 semesters)
- Composition and Conversation (Italian 301)*

Students who choose to minor in Italian are encouraged to study abroad. Of the courses taken in Florence, Italy, two courses may be applied to the minor. Certain courses taken abroad may be accepted as the equivalent of the specific requirements listed above. Those students who spend their third year in Italy may declare the minor during the first semester of their fourth year.

The remainder of the courses taken to fulfill the minor requirements may include any combination of the other courses offered by the Italian section such as literature, cinema, Special Topics, and tutorials (taken either during the third or fourth year of study). Students may take a maximum of one course in English; this course may be an Italian course taught in translation or an approved course in related departments such as History, Music and Visual Arts.

All students who minor in Italian are required to take one course in their fourth year.
Students may also pursue a major or minor in Italian Studies (Student-Designed Multidisciplinary Major/Minor) through the Center for Interdisciplinary and Special Studies (CISS).
Italian 101, 102 - Elementary Italian 1, 2
Annually
Designed for students with little or no knowledge of Italian language, this course provides an overview of basic Italian grammar with an emphasis on oral and written communication, listening comprehension, and reading. Five class hours weekly and laboratory practice. One and one-quarter units each semester.

## Italian 201, 202 — Intermediate Italian 1, 2

Annually
Provides a review of Italian grammar with an emphasis on oral and written communication. Students also read and discuss Italian literature and cultural material. Prerequisite: Italian 102 or equivalent. Four class hours weekly and laboratory practice. One unit each semester.
Italian 253 - Italian Women Writers
Alternate years
Focuses on 20th-century works of Italian women writers such as Sibilla Aleramo, Grazia Deledda, Elsa Morante, Natalia Ginzburg, and Dacia Maraini, among others. Topics include the history of women in Italy, Italian feminism, the representation of women in Italian literature, and literary genre. Conducted in English. One unit.

## Italian 255 - Italian Cinema

Alternate years
Studies the major trends in Italian cinema from the post-war Neorealist period to the present day. Films by directors such as Fellini, De Sica, Visconti, the Taviani brothers, Wertmller, and Scola, among others, will be viewed and discussed. Conducted in English. One unit.

## Italian 257 - 19th Century Italian Novel

Alternate years
Focuses on the "birth" of the Italian novel and the principal Italian novels and novelists of the nineteenth century, including Alessandro Manzoni, Giovanni Verga, and Gabriele D’Annunzio. The major artistic movements of the century-Romanticism, Realism, and Decadentism-are defined and discussed in relation to the novels in question. Conducted in English. One unit.

Italian 301 - Italian Composition and Conversation
Fall
Offers students intensive oral and written practice in Italian language through an exploration of Italian culture. Authentic materials such as literary texts, newspaper and magazine articles, and video are utilized as a basis for class discussion and written compositions. Grammar is reviewed in context. Con-
ducted in Italian. Prerequisite: Italian 202 or equivalent. One unit.
Italian 299, 399 - Special Topics
Alternate years
A special course offered either semester for the study of a literary or cultural theme, movement or problem. One unit.
Italian 260 - Dante Alternate years
Examines the life and work of Dante Alighieri with a focus on his masterpiece, La Divina Commedia. Selected cantos of the Commedia will be read and discussed. A portrait of the political, social, cultural, and religious climate in which Dante wrote will be provided. Conducted in English. One unit.

Italian 411 - Italian Renaissance Literature
Alternate years
Representative works of the 14th, 15th, and 16th centuries are studied in the context of Renaissance culture and history. Selected works by Petrarch, Boccaccio, Machiavelli, Leon Battista Alberti, Poliziano, and Castiglione. Conducted in Italian. One unit. Prerequisite: Italian 301 or equivalent.

Italian 419 - 20th-Century Italian Novel
Alternate years
Focuses on the novels, authors, and themes that define 20th-century Italian literature. Works by Italo Svevo, Alberto Moravia, Elsa Morante, Grazia Deledda, Italo Calvino, and Cesare Pavese, among others, will be studied. Conducted in Italian. One unit. Prerequisite: Italian 301 or equivalent.

## Italian 420 - 20th-Century Novel and World War II

Alternate years
A study of 20th-century Italian narrative focusing on the experience of the war. Topics include the antifascist resistance, the partisan war, the Holocaust and Italian Jews, and changes in Italian political, economic, social and cultural life resulting from the war. Authors studied include Carlo Levi, Primo Levi, Giorgio Bassani, Ignazio Silone, and Natalia Ginzburg. Conducted in Italian. One unit. Prerequisite: Italian 301 or equivalent.

## Italian 491, 492 - Third-Year Tutorial

Annually
Eligible third-year students may elect one or both of these courses only with the permission of the department chair. For students who have previously taken all other advanced courses offered in a given semester. One unit.
Italian 493, 494 - Fourth-Year Tutorial
Annually
Eligible fourth-year students may elect one or both of these courses only with the permission of the department chair. For students who have previously taken all other advanced courses offered in a given semester. One unit.

## Russian

Russia's role in today's world is of vital importance. The Russian Major and Minor at Holy Cross aim to develop students' speaking skills and also to ensure broad literacy in Russian history and culture. In addition to all levels of language study, the Russian Program offers a wide array of literature and culture courses in different centuries (early Russia, $19^{\text {th }}$ century, $20^{\text {th }}$ century, contemporary Russian), genres (drama, poetry, prose, film), and geographical focus (Kievan Rus, European Russia, Siberia). Students should take advantage of the variety of offerings to familiarize themselves with the many different aspects of Russian cultural history.
Russian major requirements: Russian majors take a minimum of 10 and a maximum of 14 courses at the intermediate level or above. Majors must successfully complete Russian 201, 202 (Intermediate Russian) and Russian 301(Composition and Conversation) or their equivalent, although major are encouraged to continue language study throughout their college careers. Majors are also required to take a
minimum of four literature and/or culture courses. Of these four courses, at least one must be selected from those conducted in Russian. Students may count toward the major one of the regularly offered courses on Russia in the Political Science or History Departments. These latter courses may not be taken in lieu of literature and culture courses conducted in Russian. Majors should seriously consider study abroad in Russia for summer study, a semester, or an academic year. Majors who study abroad are required to take at least two courses at Holy Cross in their fourth year.
Russian minor requirements: Russian minors take a minimum of six courses on the intermediate level or above. Minors are required to successfully complete Russian 201, 202 (Intermediate Russian) and Russian 301 (Composition and Conversation). Students select at least three additional courses in Russian language, literature, or culture. Students' personal interests will dictate the distribution of these remaining courses. Only the courses on Russia offered in the Department of Modern Languages and Literatures and on an approved study abroad program are counted toward the minor. Minors who study abroad are required to take at least three courses at Holy Cross, including at least one in their fourth year.

Consult with Russian Program faculty on matters of placement and minor credit. Majors and minors who spend time in Russia on study programs may participate in academic and work internship programs offered by those programs for major and minor credit.

## Russian 101, 102 - Elementary Russian 1, 2

Annually
Promotes active communicative skills along with the basics of Russian grammar. By course end, read, write, understand, and speak Russian in a broad range of everyday situations. Various aspects of Russian culture and life are introduced through the medium of language. Five class hours weekly and language lab practice. One and one-quarter units each semester.
Russian 201, 202 — Intermediate Russian 1, 2
Annually
Designed to activate students' spoken Russian, a wide variety of in-class activities allow students to practice Russian needed for most everyday situations. Textbook and workbook are supplemented with audio and videotapes. Conducted in Russian. Prerequisite: Russian 102 or the equivalent. Five class hours weekly. One and one-quarter units each semester.
Russian 252, 253 - Russian Short Story 1, 2
Every third year
Offers an opportunity to get acquainted with the most outstanding Russian writers and to read their masterpieces in the genre of the short stories. The first semester begins in the eighteenth century with Karamzin and continues through Chekhov. The second semester starts with Chekhov and brings students up to the present. Authors include Pushkin, Turgenev, Gogol, Tolstoy, Dostoyevsky, Gorky, Babel and Zoshchenko. In English. One unit.

## Russian 254 - Russian Drama

Every third year
A study of the major Russian playwrights (Fonvizin, Gogol, Griboedov, Tolstoy, Chekov, Gorky, Andreyev, Mayakovsky, Shvarts) of the 19th and 20th centuries. Emphasis is placed on auditory and visual nature of drama, by means of American, British and Russian films, and students' own exercise in acting (voluntary). Conducted in English. One unit.

## Russian 255 - 19th-Century Russian Literature

Every third year
During the 19th century, the Emancipation of the serfs, the Great Reforms, revolutionary activity and continued westernization changed Russian society dramatically. Perhaps it was these attempts at liberalization that produced the great works of Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky and Tolstoy. Read such classic works as The Bronze Horseman, Hero of Our Time, The Overcoat, Crime and Punishment and Anna Karenina. Taught in English. One unit.
Russian 256 - 20th-Century Russian Literature
Every third year
A survey of the turbulent 20th century that took Russian literature from the exhilaration of pre-revolutionary years to the uncertainty of the glasnost era. Readings include the prose and poetry of Bely, Gorky, Blok, Babel, Zamyatin, Akhmatova, Chukovskaya, and Tolstaya. Conducted in English. One
unit.
Russian 258 - Fire and Ice: Siberia in Fiction
Every third year
A consideration of Siberia as a native land, an adopted land, and a land of exile. Students start with Siberian folktales and the study of such native traditions as shamanism. Next, the course examines Siberia through Chekhov, Dostoevsky, and Shalamov as a land of both freedom and imprisonment. Finally, students read Rasputin, Astafiev, and Shukshin, whose work is devoted to the preservation of Siberia as a natural world and a culture. Narrative and documentary films complement the reading selections. Conducted in English. One unit.

## Russian 299, 399, 499 - Special Topics in Russian Literature

Annually
A special course offered either semester on a single author or theme which have included: Akhmatova's poetry, the short stories of Bulgakov, Christianity in Russian literature, the world of Chekhov, and 20thcentury Russian poetry. Conducted in English or Russian. One unit.
Russian 301 - Russian Composition and Conversation 1
Fall
Continued development of oral and written language skills and cultural competency through the use of Russian literature and multimedia materials. Prerequisite: Russian 202 or the equivalent. Three class hours weekly include writing laboratory with native speaker. One unit.

## Russian 303, 304 - Advanced Studies in Russian Culture 1, 2

Annually
Analysis of literary works and documentary materials with the aim of probing Russian cultural traditions, particularly in the 19th and 20th centuries. All discussions, readings and papers in Russian. Prerequisite: Russian 301 and permission of instructor. One unit each semester.

## Russian 391, 392 - Third-Year Tutorial

Annually
With permission of Department Chair and instructor only. For third-year students who wish to pursue work not covered by one of the regularly offered courses. One unit.
Russian 402 - Parody and Satire in Russian Literature
Every third year
Examines the absurdity and injustice of the housing crisis of the 1920's in the work of the major writers of early Soviet satire-Zoshchenko, Kataev, Bulgakov, and Averchenko. Themes include the meaning of home, how it reflects identity and how the new Soviet state will relate to past Russian culture. Conducted in Russian. One unit.

## Russian 403 - 19th-Century Russian Poetry

Every third year
An introduction, a critical study, and readings in the major Russian poets of the 19th century. Among the poets studied are Pushkin, Lermontov, Tyutchev, Fet, and Nekrasov. Lectures, discussions, and readings in Russian. One unit.
Russian 404 - 20th-Century Russian Poetry
Every third year
A sequel to Russian 403, the course introduces one of the most revealing components of 20th-century Russian culture, while continuing to build on students' language skills. Among the poets studied are Blok, Akhmatove, Mandelstam, Paternak, Tsvetaeva, Brodsky, and Yevteshenko. Lectures, discussions, and readings in Russian. One unit.

## Russian 405 - Alexander Pushkin

Every third year
An extensive introduction to a cultural phenomenon unique in Russian and world literature. Pushkin initiated and promoted a range of literary genres: lyrical poems, narratives in verse, dramas, novels, short stories, fairy tales, political epigrams, love songs. There is no field of writing in which Pushkin did not leave models of highest achievement. Conducted in Russian. Prerequisite Russian 301 or the equivalent. One unit.

Russian 491, 492 - Fourth-Year Tutorial
Annually
With permission of department chair and instructor only. For fourth-year students who wish to pursue work not covered by one of the regularly offered courses. One unit.

## Spanish

The Spanish major must complete 10 courses at the Composition and Conversation level or above, including: Composition and Conversation (Spanish 301) or Composition for Bilingual Speakers (Spanish 317); one semester of culture and civilization (regular offerings include Spanish 302 and 303-recommended for first- and second-year students-and Spanish 413, 420, 421 and 422 -recommended for thirdand fourth-year students); Introduction to Literary Genres (Spanish 305); one semester of survey of early literature (Spanish 310 or 312); one semester of survey of modern literature (Spanish 311 or 313); one of Spanish for Business (Spanish 314), Advanced Composition and Conversation (Spanish 315), Advanced Grammar (Spanish 316) or Phonetics and Phonology (Spanish 318); one advanced literature course in pre-19th-century literature (regular offerings include Spanish 400, 401, 402, 409); one advanced course in modern literature (regular offerings include Spanish 403, 404, 405, 406, 407, 408, 410, 411461 ). At least two advanced courses ( 400 or above) must be taken at Holy Cross during the fourth year, one of which must be in literature. Majors should note that internships and courses taught in English will not count towards the fulfillment of the Spanish major. A meaningful degree in Spanish should ideally be enhanced by a study abroad experience. We currently have year long programs in Spain (León and Palma de Mallorca) and in Mexico (Puebla).
Directed Independent Study of Spanish: Students interested in learning Spanish have the option of participating in Directed Independent Spanish-language courses. These elementary- and intermediatelevel courses offer an alternative approach to language instruction for students who are motivated to work independently and enjoy using technology. Students use computer-based materials to direct their own learning but are required to both correspond and meet with a professor frequently as well as attend weekly conversation classes with foreign language assistants.

## Spanish 101, 102 - Elementary Spanish 1, 2

Fall, spring
An intensive introduction to all elements of the Spanish language. The development of linguistic competency aims to promote the understanding of human language as a vehicle for communication shaped by the cultural worldview of speakers in Spanish-speaking communities. Five class hours weekly, including two hours of practicum. One and one-quarter units each semester.
Spanish 103 - Intensive Elementary Spanish
Annually
An intensive review of all the topics covered in both Elementary Spanish 101 and 102. Five class hours weekly, including two hours of practicum. One and one-quarter units.

## Spanish 105, 106 - Directed Independent Elementary Spanish 1, 2 <br> Fall, spring

An alternative approach to Spanish 101, 102 which allows students to complete course requirements by working independently with technology-based materials. Two class hours weekly and laboratory practice. One unit each semester.
Spanish 108 - Directed Independent Intensive Elementary
Fall, spring
An intensive review of all of the topics covered in both Elementary Spanish 101 and 102. Requires independent work with technology-based materials which help direct learning. Two class hours weekly and laboratory practice. One unit.
Spanish 201, 202 — Intermediate Spanish 1, 2
Fall, spring
An intensive grammar review, followed by oral practice, and readings in literature and culture. For students who have completed Spanish 102 or its equivalent. Four class hours weekly, including one hour of practicum. One unit each semester.
Spanish 215, 216 - Directed Independent Intermediate Spanish 1, 2
Fall, spring
An alternative approach to Spanish 201, 202 which allows students to complete course requirements by working independently with technology-based materials. One class hour weekly and laboratory practice. One unit each semester.

Spanish 251 - Spanish in the U.S.: A sociolinguistic Perspective Every third year An overview of the main Latino communities in the U.S., the context of their presence here, and their experience as an ethnolinguistic minority. Topics include, but are not limited to, the varieties of Spanish spoken in these communities, language acquisition, bilingualism, code switching and other languagecontact phenomena, language policy, language maintenance and loss, bilingual education, the Official English Movement, and the interaction between language and gender, race, social class and ethnicity. Taught in English. One unit.
Spanish 301 - Spanish Composition and Conversation
Fall, spring
Designed for students who have completed one year of intermediate Spanish. This course (or its equivalent) is a prerequisite to any literature course taught in Spanish. Class is limited in size to enable students to receive individual attention in developing their writing and speaking skills and oral comprehension. One hour per week of practicum required. Prerequisite: Spanish 202 or the equivalent. One unit.

Spanish 302 - Aspects of Spanish Culture
Alternate years
Devoted to the study of outstanding examples of Spanish thought, art, and historical developments. Readings, lectures, and discussions in Spanish. Prerequisites: Spanish 301 or the equivalent. One unit.

## Spanish 303 - Aspects of Spanish-American Culture

Alternate years
Devoted to the study of examples of Spanish-American culture from pre-Columbian times to the present, including the early civilizations, the Spanish Conquest, the Wars for Independence, and the modern period. Readings, lectures, and discussions in Spanish. Prerequisites: Spanish 301 or the equivalent. One unit.

Spanish 305 - Introduction to Literary Genres
Fall, spring
Designed as an introduction to drama, poetry, and prose fiction of 20th-century Spain and Spanish America, this course familiarizes students with literary analysis and further develops their oral and written skills. Recommended for students who have completed Composition and Conversation and a course in Hispanic culture. Advanced (Spanish) literature students should not enroll in this course. Conducted in Spanish. Prerequisite: Spanish 301 or the equivalent. One unit.
Spanish 310, 311 - Survey of Spanish Literature
Alternate years
A survey of the literature of Spain from medieval times to the present, including the major writers of the Golden Age, of the romantic and realist periods, and of the Generation of 1898. Conducted in Spanish. Prerequisite: Spanish 301 and Spanish 305. One unit each semester.
Spanish 312, 313 - Survey of Spanish-American Literature
Alternate years
A study of the literature of Spanish America from pre-Columbian times to the present, including the major writers of the Colonial period, and of the 19th and 20th centuries. Conducted in Spanish. Prerequisite: Spanish 301 and Spanish 305 . One unit each semester.

Spanish 314 - Spanish for Business
Alternate years
An introductory course in business Spanish that aims at developing the written and oral skills needed to interact effectively with Spanish speaking clients. The course emphasizes the acquisition of basic business terminology in Spanish, as well as the development of cross-cultural awareness in a professional setting. Prerequisites: Spanish 301 or its equivalent. One unit.
Spanish 315 - Advanced Spanish Composition and Conversation
Fall, spring
This one-semester course provides practice in all the skills of advanced language through a wide variety of activities: the study of basic phonetics, in-depth review of difficult grammatical structures, conversations, readings, and discussions. Students are trained in analytical writing. Prerequisites: Spanish 301 or the equivalent. One hour per week of practicum required. One unit.

This one-semester course provides intensive review and practice of advanced grammar structures with emphasis on improving writing skills. Systematic grammar drills, translation and readings will serve as a basis for analysis of syntactic and semantic structures of Spanish. The course emphasizes strategies for all stages of the writing process, from generating and organizing ideas to rules of accentuation and punctuation. Prerequisite: Spanish 301 or the equivalent. One unit.

## Spanish 317 - Composition for Bilingual Speakers

 FallDesigned for bilingual students who speak Spanish at home but would like to improve their reading and writing skills. Focuses on Latino issues through discussion and commentary of the works of contemporary Latino writers and film makers, with emphasis on using the language-reading and writing-rather than reviewing the grammar. The class is limited in size to enable students to receive individualized attention. One unit.

Spanish 318 - Phonetics and Phonology
Every third year
A practice course for improvement of pronunciation and introduction to phonetic transcription. Aimed at students with a desire to improve their pronunciation of Spanish, expand their knowledge of the various dialects of the language, and an interest in knowing how the sound system of Spanish works. Conducted in Spanish. Prerequisite: Spanish 305. One unit.

Spanish 399 - Special Topics
Alternate years
Advanced courses in Hispanic linguistics, literature or culture. Topic varies with each separate offering. Literary offerings can be used by majors as the equivalent of one of the required 400 level literature courses. One unit.

Spanish 400 - Topics in Medieval Spanish Literature Alternate years
Focuses on different aspects of Medieval Spanish Literature. Topics previously offered have included Medieval Heroes, Saints and Sinners, The Image of Women, Love in Medieval Spain, Death and Dying. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 310). One unit.

Spanish 401 - Topics in Golden Age Literature
Alternate years
Focuses on different aspects of Spanish Golden Age Literature. Topics previously offered have included Golden Age Drama and its Staging, Spanish Golden Age Sentimental Fiction, The Evolution of Spanish Romance, and Renaissance and Baroque Poetry. Conducted entirely in Spanish. Prerequisite: Spanish 305 and one semester of survey (preferably Spanish 310). One unit.
Spanish 402 - Don Quixote
Alternate years
A close reading of Cervantes' masterpiece in order to provide a coherent understanding of the author's attitude toward life and art. Through an analysis of such elements as point of view, plot structure, characterization, interpolated novels and poems, language, and irony, the course defines Cervantes' conception of narrative prose fiction and his role as the originator of the modern novel. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 310). One unit.
Spanish 403 - 19th-Century Spanish Literature
Every third year
A study of the rise of romanticism and realism in Spain and their respective developments as literary movements in the Spanish peninsula. Course may include such authors as Larra, Bécquer, and Galdós, and such classics as Don Alvaro o la fuerza del destino and Don Juan Tenorio. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 311). One unit.
Spanish 404 - 20th-Century Spanish Narrative
Every third year
A study of the major trends and writers of fiction in Spain after the realist and naturalist eras. Through the writings of such prominent authors as Cela, Sender, and Matute, the course examines the formal and thematic characteristics of Spanish narrative before and after the Spanish Civil War. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 311). One unit.

Spanish 405 - Modern Spanish-American Narrative Every third year
Explores the response of several modern Spanish-American writers to the following questions: What is fiction? What are the roles of the author, the narrator, and the reader? Special attention is given to such outstanding novelists of the "Boom" as Rulfo, Cortázar, Cabrera Infante and García Márquez, and to the development of their works within the context of the modern novel. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 313). One unit.
Spanish 406 - Modern Spanish Drama
Every third year
Focuses on the different trends of 20th-century Peninsular theater: poetic theater, social, existential, and the theater of the absurd. The course includes readings from such representative playwrights as Federico García Lorca, Antonio Buero Vallejo, Alfonso Sastre, Antonio Gala, and Fernando Arrabal. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 311). One unit.
Spanish 407 - Topics in Modern Spanish and Spanish-American Poetry Alternate years
Examines various aspects of Spanish and Spanish-American poetry since Modernismo. Among these are: Rubén Darío and Modernismo; Antonio Machado; Hispanic vanguard poetry; the Grupo poético de 1927; Pablo Neruda; and Spanish-American social poetry. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 311 or 313). One unit.

Spanish 408 - Gabriel García Márquez
Every third year
Provides a general introduction and overview of García Márquez' writing career and analyzes some of his most notable novels. Learn to read works analytically to uncover the relationship between the aesthetic and historical dimensions of García Márquez' literary universe. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 313). One unit.

## Spanish 409 - Topics in Colonial Spanish-American Literature

Alternate years
An advanced course in 16th-18th-century Spanish-American literature. Readings emphasize the diversity of the colonial period, with in-depth analyses of works from several major genres. Discussion focuses on the significance of these works from a contemporary perspective as well as on the historical and cultural distance that separates us from the world views contained therein. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 312). One unit.

## Spanish 410 - Literature of Exile, Immigration, and Ethnicity

Every third year
A study of the novels of Puerto Rican, Mexican-American, U.S. Dominican, and Cuban-American writers from 1970 to the present. Explores how the experience of biculturality and displacement is dramatized in the literature of these authors. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 313). One unit.
Spanish 411 - Latin American Literature of 19th Century
Every third year
Examines the models for understanding the different cultural formations in the emancipated ex-colonies of Spain. Focuses on periods of ideological change and artistic revolution from independence on, exploring the connections between ideology and representation of national models. Prerequisite: Spanish 305 and a semester of survey. One unit.
Spanish 413 - Spanish in the US: A Sociolinguistic Perspective
Alternate years
An overview of the main Latino communities in the U.S., the context of their presence here, and their experience as an ethnolinguistic minority. Topics include, but are not limited to, the varieties of Spanish spoken in these communities, language acquisition, bilingualism, code switching and other languagecontact phenomena, language policy, language maintenance and loss, bilingual education, the Official English Movement, and the interaction between language and gender, race, social class and ethnicity. Prerequisites: 2 courses beyond Spanish 301 or its equivalent, or by permission of instructor. Offered in

Spanish. Also offered in English as Spanish 251. One unit.
Spanish 420 - Latin-American Film
Every third year
Serves as an introduction to film analysis, studies the development of the medium in Latin America, and explores issues of cultural difference through discussion of the cinematic portrayal of representative historical periods, figures, intellectual and political movements. Conducted in Spanish. Prerequisite: Spanish 305. One unit.

## Spanish 421 - 20th-Century Spain through Film

Every third year
Studies some of the most relevant historical, political, and social issues in 20th-century Spain as depicted through film. Focuses on films which portray Spain at its different historical stages (pre-Franco era, Francoist Spain, transition era, and modern Spain). Conducted in Spanish. Prerequisite: Spanish 305. One unit.

Spanish 422 - Cultural History of The Spanish Language
Every third year
Provides a general overview of the Spanish language as the result of historical and cultural developments. Examines the main characteristics of the Spanish language and the different varieties of Spanish that are spoken today. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey. One unit.
Spanish 461 - 19th- and 20th-Century Women Writers of Spain Every third year Examines some of the outstanding women writers of the 19th and 20th centuries of Spanish literature. Explores the most prominent literary, social, cultural, and existential issues expressed in their works. These works are studied in the context of the major trends of European literature in the past two centuries. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 311). One unit.

Spanish 491, 492 - Third-Year Tutorial
Annually
Eligible third-year students may elect one or both of these courses only with the permission of the Department Chair. Tutorials are offered only to students who have taken previously all other advanced courses offered in a given semester. One unit each semester.

Spanish 493, 494 - Fourth-Year Tutorial
Annually
Eligible fourth-year students may elect one or both of these courses only with the permission of the Department Chair. Tutorials are offered only to students who have taken previously all other advanced courses offered in a given semester. One unit each semester.

## Studies in World Literatures

Studies in World Literatures courses are conducted in English and use translations in English of literary texts originally written in another language. Most have no prerequisites and are open to all students. Those courses carrying a course number specifically designated as STWL consist of a comparative investigation involving the literatures of several cultural and/or linguistic communities. Those courses carrying a course number designating a specific language group - for example CHIN, FREN, GERM, ITAL, RUSS, etc. - consist of a study concentrating on one national literature.

Requirements for the major in Studies in World Literatures: 10 courses focusing on the study of nonAnglophone literatures and/or on a comparative study of literatures. Among these 10 courses, at least three must carry the STWL designation, and include:

- one semester of a survey course giving a historical and comparative overview of the development of the major Western literatures and/or of the major Non-Western literatures (e.g.: STWL 201, 202);
- a one-semester capstone project completed in the student's fourth year. This project will consist of a comparative study involving at least two distinct national literatures (STWL 441).
The remaining seven courses must include the concentrated study of a minimum of two distinct national literatures. No more than five courses may deal with any one single national literature.

STWL major credit may be applied to literature courses taken in the target, or original language, as well as to a maximum of two literature courses taken outside the Department of Modern Languages \&

Literatures, providing these courses are approved by the STWL program coordinator. Up to four courses taken in a College Study Abroad Program may be approved for STWL major credit.

In addition to the STWL courses listed below, the following courses, offered in English, are available for Studies in World Literatures major credit (descriptions of these courses may be found in the course listings of the appropriate Language Program.):

French 232: Moulin Rouge: Intersections of Art \& Popular Culture
French 461: Writing Madness in Africa
German 250: Metropolis Berlin
Italian 251: Renaissance Florence/History and Literature
Italian 253: Italian Women Writers
Italian 257: 19th Century Italian Novel
Italian 260: Dante
Russian 252: Russian Short Story
Russian 254: Russian Drama
Russian 255: 19th-Century Russian Literature
Russian 257: 20th-Century Russian Literature

## Studies in World Literatures 201 - Landmarks of Western Literature: the Ancient World to the Renaissance <br> Alternate years

An introduction to major works of Western literature, and to the mechanisms of the creation of a canon of Western literature. Included are texts ranging from the Mesopotamian epic of Gilgamesh, to the works of Cervantes and of Montaigne. One unit each semester.
Studies in World Literatures 202 — Landmarks of Western Literature: The Modern World Alternate years
An introduction to major works of Western literature, and to the mechanisms of the creation of a canon of Western literature. Included are texts from the 17th Century to the present. One unit each semester.

## Studies in World Literatures 235 - Introduction to Postcolonial Discourses Annually

 Contacts between Europe and the rest of the world, between colonizers and colonized people engendered profound social, cultural, economical, political and psychological transformations. A comparative examination and discussion of major ideas put forward by intellectuals who adapt a "Third World" perspective: Said, Fanon, Achebe, Ngugi, Spivak, Brathwaite, Babha and many others. One unit.
## Studies in World Literatures 241 - Francophone Cross-Culturalities \& Creolizations

Every third year
A general introduction to the emergence of diverse francophone cultures in the world. The main focus is on North American, Caribbean, North African, and sub-Saharan cross-cultural encounters and creolizations. Topics considered include: colonialism, postcolonialism, neocolonialism, diglossia, majority/minority conflicts, and the interplay of Western and indigenous traditions in the development or invention of "new" cultures. Authors to be read are: Chopin, Djebar, Fanon, Kerouac, Ousmane, Roy, Vallières, and Zobel. Films include: Black Robe, Chocolat, Battle of Algiers. One unit.
Studies in world Literatures 261 - Exile and Cultural Production in Africa and the Caribbean Annually
Exile is a universal phenomenon. It is generally understood as voluntary or forced expatriation, displacement. Exile may also be understood as inadequacy and irrelevance to function in specific world as compared to the "exile" of Prospero to Caliban island. They represent two extreme categories on the social spectrum: that of the natural ruler, and the naturally ruled. Explores "Caliban's" inadequacy to adjust to his own postcolonial society after a long sojourn in the Prospero's world. Most exiles end up writing books or producing films to "translate" their experiences. This course will study books and a few films
produced by exile African and Caribbean artists. One unit.
Studies in World Literatures 265 - Existentialism in Literature
Every third year
Studies Existentialism primarily as it is expressed in literary texts, but consideration is also given to its philosophical roots and evolution in Western Culture. Among authors read are Pascal, Kierkegaard, Dostoevsky, Unamuno, Gide, Mann, Kafka, Sartre, Camus, Updike, and Flannery O’Connor. One unit.

## Studies in World Literatures 267 - (Post) Colonial Writing: African and the Caribbean experience <br> Annually

Read texts, watch films and discuss the vision proposed by artists from areas that entered modernity through imperialism. Problems such as dependency and appropriation of the other's language and culture are addressed. Important concepts such as Negritude (Senghor, Cesaire); African Personality (Soyinka); Creoleness (Chamoiseau, Confiant); colonial education; violence, nationalism and resistance; postcolonial culture, modernity and identity are discussed. One unit.
Studies in World Literatures 299 - Special Topics
Annually
Offered for the study of a particular literary genre, form, theme, etc. Topics announced in the preceding semester. One unit.

## Studies in World Literatures 441 - Fourth-Year Capstone Project <br> Annually

An individual research project involving a comparative study of at least two distinct national literatures. Must be directed by one principal faculty advisor, but must include consultation with at least two STWL faculty. A lengthy final paper and public presentation are expected. One unit.

## Music

Shirish Korde, M.M., Professor
Osvaldo N. Golijov, Ph.D., Associate Professor
Carol Lieberman, D.M.A., Associate Professor
Jessica P. Waldoff, Ph.D., Associate Professor and Chair
David Claman, M.F.A., Ph.D., Assistant Professor
Sarah Grunstein, D.M.A., Assistant Professor
James David Christie, M.M., Distinguished Artist in Residence; Director, Schola Cantorum
Jennifer K. Ashe, Cand. D.M.A., Visiting Instructor, voice
Sarah Bob, M.M., Lecturer, piano
Shawn Briggs, B.A., Lecturer and Recording Technician
Orlando Cela, M.M., Lecturer, flute
Joel Cohen, B.M., Lecturer, cello
Eric Culver, D.M.A., Lecturer; Director, Chamber Orchestra and Brass Ensemble
Pamela E. Getnick, D.M.A., Lecturer, Director, College Choir and Chamber Singers
Marian C. Hanshaw, M.M., Lecturer, piano
Jane Harrison, B.M., Lecturer, oboe
Bruce Hopkins, M.M., Lecturer, trumpet/trombone
Alan M. Karass, M.A., Lecturer
Michael Monaghan, M.A., Lecturer; Director, Jazz Ensemble
Thomas Mountain, Ph.D., Lecturer
Pieter Struyk, B.M., Lecturer, percussion
Robert Sullivan, Lecturer, guitar
Peter Sulski, B.M., Lecturer, violin/viola
Marsha Vleck, M.M., Lecturer, voice
The Music Department offers all Holy Cross students the opportunity to develop an understanding and appreciation of music through a wide range of courses in the history and theory of music, both on an introductory and an advanced level. It also provides an opportunity for further study to those who, by virtue of previous training and continuing serious interest, wish to focus on music.

Majors in Music must take a minimum of 10 music courses (the maximum is 14). Required courses are music 201, 202, 211, 212, 301, 302, and 400. Electives can include courses in History, Theory, Composition, Ethnomusicology, and Performance in addition to those required. Music 101 and Music 103 do not count toward the major. Music majors are strongly urged to participate in one or more of the performing organizations of the College.

All music courses are open to majors and non-majors. Students without prior experience should choose from courses 100-199; students with prior musical experience should choose from courses numbered 200 and above. Students with AP credit in music will not be awarded placement in the music curriculum and will not receive credit toward the minimum number of courses required for the major.

Facilities in the Music Department include a music library with state-of-the-art listening equipment and a sizable collection of scores, books, recordings and videotapes; practice rooms with pianos; classrooms; a studio for electronic and computer music; an ear training lab; music notation workstations; and a variety of traditional instruments.

The Department offers two merit-based scholarships. The Brooks Music Scholarship is offered to an incoming student with a distinguished academic and performance or composition record who plans to major in Music at Holy Cross. The recipient of this scholarship is granted full tuition, independent of need. The scholarship is renewable annually, provided that the student maintains a strong academic record in the College as well as in the Music Department. Candidates should address inquiries to Chair, Music Department, College of the Holy Cross, Worcester, MA 01610. The application deadline is January 15th. The Organ Scholarship is offered on a periodic basis and is renewable on a yearly basis. The
recipient of this scholarship will have available the 1985 four manual, fifty-stop mechanical action organ located in the beautiful St. Joseph Memorial Chapel. As the Holy Cross Organ Scholar, it is expected that the awardee will assist the College Organist in all aspects of the chapel music program. The Organ Scholar will also be expected to major in music, take voice lessons, study organ privately for four years, and have a career goal in church music and/or organ. Applicants for the scholarship should have experience in church music and a strong background in keyboard studies and sight-reading. Candidates should address inquiries to Prof. James David Christie, Music Department, College of the Holy Cross, Worcester, MA 01610. Deadline for submission of scholarship applications is January 15th in the year when the scholarship is being offered.

## Performance Program

The Performance Program consists of a series of courses offered by the Music Department in instrumental and vocal instruction at the intermediate and advanced levels. Instruction is provided by professional musicians selected by the Music Department. Eleven lessons are offered per semester. Admission to a course in Performance is gained by a successful audition with members of the department following at least one semester of prior study with a Holy Cross faculty member. No student may enroll in more than one Performance course each semester. Students must register for the course as a fifth course in the first semester in which they participate in the program. At the end of the first semester of registration in Performance, they will be assigned an IP (In Progress). During the second semester they may register for Performance as a fourth or fifth course with a letter grade. Students may only claim a maximum of two units of Performance with letter grade toward graduation. Students enrolled in the program for credit must:

- present a letter of evaluation from their teacher at the end of the semester;
- take a final jury examination given by members of the Music Department, at which time they will perform at least two pieces studied during the semester;
- take a semester of theory or history (excluding Music 101 and Music 103) prior to or concurrently with Performance.
- perform at least once each semester on recitals sponsored by the Department.

The Department sponsors student recitals and also encourages participation in the following performing organizations: Holy Cross Chamber Orchestra, Holy Cross Jazz Ensemble, Holy Cross Choir, Holy Cross Chamber Singers, Holy Cross Chamber Music Ensemble, Chapel Choir, Crusader Marching and Pep Band, Gamelan, Madrigals, and the Schola Cantorum.

## Courses

Music 101 - Introduction to Music
Fall, spring
A one-semester introduction to art music in the Western tradition, its forms and history, with an emphasis on the major composers of the common practice period. Assignments focus on developing critical listening skills and an appreciation and understanding of Western art music. One unit.
Music 103 - Fundamentals of Music
Fall, spring
An introduction to the rudiments of music theory (notation, scales, intervals, chords, rhythm and meter) and basic musicianship (keyboard skills, score reading and ear training). For students with no previous musical knowledge. One unit.

Music 142 - American Popular Song
Alternate years
A historical survey of American popular song-Stephen Foster, blackface minstrels, sentimental parlor songs, songs of the Civil War, gospel hymns, vaudeville, Tin Pan Alley, Broadway musicals, Jerome Kern, George and Ira Gershwin, jazz-band songs and singers, country music, rhythm and blues, rock'n'roll, rock, popular "folk" songs, and more. One unit.

## Music 143 - History of Rock

Alternate years
A survey of rock music from its beginnings in earlier forms of popular music to 1990. Attention will be given to the relationship of rock music to its cultural, political, and economic contexts. One unit.

## Music 150 - American Music

Alternate years
Surveys three main repertoires of music in the United States: folk and traditional music of urban, rural, and ethnic origin; jazz; and art music from Charles Ives to the present, with particular attention to the influence of science and technology on recent developments. One unit.

## Music 151 - World Music

Alternate years
Introduction to music of selected African, Asian, and American cultures. Each culture is approached through its social and cultural context, its theoretical systems and musical instruments, as well as its major musical and theatrical genres. One unit.

## Music 153 - Music of Bali-Gamelan 1

Fall, spring
Introduces students to Balinese music through the performance of selected pieces from the Gong Kebyar repertory. Instruction will be provided in the technique of playing the instruments that make up the Gamelan. One unit.

## Music 160 - Introduction to Electronic Music

Annually
Surveys musical and scientific theories related to developments in electronic music. Topics include: physical parameters of audio waveforms and specific means of processing sound using digital synthesizers and computers. Students are introduced to techniques of electronic music composition through the analysis of selected works as well as studio assignments. No prerequisite. One unit.

## Music 199 - Special Topics

Annually
Topics include Song through the Ages, Jazz: A Historical Survey, and others. One unit.

## Music 201 - Theory of Music 1

Fall
The first semester of a two-semester intermediate theory sequence devoted to the materials of modal and tonal music: elementary counterpoint, harmony, and analysis. This course is designed to develop the skills and theoretical concepts (voice-leading, harmonization of melodies, figured bass, etc.) that underlie the performance, analysis, and composition of music. Prerequisite: Fundamentals of Music or equivalent background. One unit.

## Music 202 - Theory of Music 2

Spring
The second semester of the two-semester intermediate theory sequence. Prerequisite: Theory 1 or permission of the instructor. One unit.
Music 211 - History of Western Music 1
Fall
A survey of the history of music, its notation, forms, and styles, in Western Europe from the development of music notation in the middle ages to the death of Bach in 1750. Topics include genres and composers of the medieval, renaissance, and baroque periods as well as the study of representative works from scores and recordings. Prerequisite: the ability to read music. One unit.
Music 212 - History of Western Music 2
Spring
This course traces the history and development of Western music from 1750 to the present, with emphasis on the major composers and genres of the classical, romantic, and modern periods. Prerequisite: History 1 or permission of instructor. One unit.
Music 213 - The Organ: History and Music
Alternate years
An introduction to the history of the construction and design of the pipe organ and its music from the Middle Ages through the present time. One unit.

## Music 214 - Music of the 20th Century

Alternate years
A study of representative works of this century, illustrating their compositional techniques and relationship to the past (i.e., the music of Bartok, the different styles of Stravinsky, the atonal and serial music of Schoenberg and his followers). This course also includes selected readings on contemporary music theory and practice. Prerequisite: Fundamentals of Music or equivalent knowledge. One unit.

## Music 215 - Music of the Classical Era

Alternate years
The rise and development of the Viennese classical style with an emphasis on the music of Haydn, Mozart, and Beethoven. Prerequisite: ability to read music, or permission of the instructor. One unit.
Music 216 - Music of the Baroque Era
Alternate years
A study of the most important developments in French, German, and Italian Baroque national styles, from the beginning of the 17 th century to the middle of the 18th century. Prerequisite: ability to read music, or permission of instructor. One unit.

Music 218 - Jazz/Improvisation 1
Fall
This course introduces students to the fundamentals of jazz harmony and improvisation. Topics include chord and scale construction, harmonic progression, symbols used in improvisation, jazz scales and modes. These theoretical concepts are applied to the analysis and performance of standard jazz tunes. A portion of the class is devoted to performance and improvisation. One unit.
Music 219 - Jazz/Improvisation 2
Spring
Examination and analysis of contemporary jazz improvisation techniques. Students are required to play their own instruments in class. Recorded jazz solos by jazz artists will be analyzed and discussed. One unit.

Music 220 - Music of the Romantic Era
Alternate years
An exploration of the repertoire, forms, aesthetics, and social contexts of 19th-century European art music, as well as its relationships with poetry, drama, philosophy, and the visual arts. One unit.
Music 225 - Tutorial
Annually
Tutorials in Computer Music, Conducting, Music History, Great Composers, Jazz, and other topics. By arrangement. One unit.
Music 230-240 - Great Composers
Annually
The study of the life and works of a major composer (e.g., Beethoven, Mozart, Wagner, Stravinsky, J.S. Bach), with an emphasis on the development of musical style, the immediate socio-cultural context, the contemporary reception of his or her music, and the evaluation of the composer's achievement by posterity. One unit.
Music 241 - Music and Theatre
Annually
An introduction to opera, musical comedy, and related genres such as dance and film music, with attention to the relationship between drama and music. A brief historical survey of each category with study of representative scenes and complete works. One unit.
Music 251 - Concerto
Alternate years
The study of representative works written for soloists and orchestra from the late 17th-century Concerto Grosso to the Solo Concerto of the 20th century. Repertoire includes the Brandenburg Concertos of J.S. Bach, the solo piano and violin concertos of Mozart and Beethoven, and selected works of Brahms, Liszt, Rachmaninov, Bartok, and others. One unit.
Music 252 - Symphony
Alternate years
An introduction to the orchestra, its instruments, and repertory from the inception of public concerts in the 18th century to the present day. One unit.
Music 253 - Music of Bali-Gamelan 2
Fall, spring
This course will introduce students to more advanced techniques of playing the instruments in the Gamelan. One unit.

Music 254 - Music for Keyboard
Alternate years
A survey of representative works for keyboard instruments (organ, harpsichord, clavichord, fortepiano and the modern piano) from the 17th century to the present. One unit.
Music 255 - Music of Latin America
Alternate years
The discovery and exploration of the different cultures of Latin America through their music. The course focuses on five regions that are musically rich and representative of the variety of roots from which Latin American people have emerged - Brazil, Argentina, Andes, Mexico and Caribbean Islands. One unit.
Music 256 - Masterpieces for Small Ensembles
Alternate years
This course will explore vocal and instrumental repertoire from the 17th century to the present that was intended for performance in an intimate setting and is therefore referred to as "chamber music." Works for String Quartet, Piano Trio, Wind Quintet and Baroque Trio Sonata as well as music for voice with instruments (madrigals, art songs, cantatas) are studied. One unit.
Music 299 - Special Topics
Annually
Topics vary and include Survey of African American Music, and India: Religion/Music/Visual Art. One unit.
Music 301 - Theory of Music 3
Fall
This course focuses on the analysis and composition of tonal music through the study of representative works of such composers as Bach, Haydn, Mozart, Beethoven, and Brahms. Students are required to produce original compositions. Prerequisite: Theory 2. One unit.
Music 302 - Theory of Music 4
Spring
This course focuses on 20th-century musical systems with an emphasis on the study of compositional theory and the analysis of selected works of 20th-century European and American composers. Original composition is required. One unit.
Music 303 - Theory of Music 5
Every third year
Theory 5 offers advanced theoretical studies for students who have completed the Theory $1-4$ sequence. This course is especially valuable for those students who plan to pursue graduate studies in musicology or theory/composition. One unit.

Music 325 - Tutorial
Annually
Tutorials in Orchestration, Theory: Composition-Form-Analysis, Music History, Vocal Performance and Jazz Performance. By arrangement. One unit.

Music 331, 332 - Performance Fall, spring
Instrumental or vocal lessons for students of intermediate competency. Interested students must consult with the Chair of the Department. One unit.
Music 399 - Special Topics
Annually
Topics include. Advanced Composition and Analysis. One unit.
Music 400 - Fourth-Year Seminar
Spring
This course is designed to integrate the three areas of music: History, Theory and Performance. Required for music majors. Topics vary and may be selected from the important repertoires of both Western and non-Western music. Prerequisite (or co-requisite): Music 212 and Music 302. One unit.

Music 401 - Musicology
Alternate years
An advanced topics course for students with a serious interest in music history and theory, especially majors planning to continue their studies in graduate school. Readings center on historical and analytical methods, recent trends in scholarship, and historiography. Prerequisites: Music 202. One unit.

Musc 431, 432 - Performance
Fall, spring
Instrumental or vocal lessons for students of intermediate to advanced competency. Interested students must consult with the Chair of the Department. One unit.

Music 433, 434 - Advanced Performance
Fall, spring
Instrumental or vocal lessons for students of advanced competency. Interested students must consult with the Chair of the Department. One unit.

## Naval Science

CAPT Robert A. McNaught, USN, M.S., Professor and Chair
CDR Larry A. Martin, USN, M.A., Associate Professor
The Department of Naval Science, a recognized department of instruction within the College, educates and trains young men and women to serve as commissioned officers in the Navy and Marine Corps. Only those men and women reasonably disposed to accept a commission in the Navy or Marine Corps should plan to enter the Naval Reserve Officers Training Corps (NROTC) Program. This affirmation must be understood clearly by everyone who applies for the program.

## Scholarship Program

Graduating high-school students can apply through the national competition for a four-year Naval ROTC Scholarship. If selected for the four-year Naval ROTC Scholarship Program, they receive full tuition, all academic fees, military uniforms, a stipend of $\$ 750$ per academic year for textbooks, and a graduated monthly subsistence allowance ( $\$ 250 /$ month for Freshmen, $\$ 300$ for Sophomores, $\$ 350$ for Juniors and $\$ 400$ for Seniors) while attending college. Additionally, the College of the Holy Cross offers free room to all four-year national scholarship winners living on campus. They are required to take certain college courses, undergo three summer training cruises, each approximately four weeks in duration, and are required to serve at least four years on active duty after commissioning.

Second-year college students can apply through the national competition for the two-year Naval ROTC Scholarship Program. If selected, during their third and fourth years they will receive full tuition, all academic fees, the annual stipend of $\$ 750$ for textbooks, military uniforms, and a monthly stipend the same as a four year scholarship student. In addition, they will attend the Naval Science Institute at Newport, R.I., for six weeks during the summer before their third year, will be required to take certain college courses, and will undergo one summer training cruise of four weeks duration. They will be required to serve at least four years on active duty after commissioning.

## College Program

First- and second-year students at the College may apply directly to the Professor of Naval Science for enrollment in the College Program (non-scholarship). After completion of at least one semester in the College Program, students who have achieved a GPA of 2.5 or higher, passed one semester of calculus with a grade of C or better, and performed well in the battalion may be recommended by the Professor of Naval Science for a Naval Service Training Command Controlled Scholarship. The scholarship includes all the same rights and responsibilities as a scholarship student detailed above.

College Program students not selected for a scholarship by the beginning of their junior year must be selected for advanced standing or will be dropped from the NROTC program. Selection for advanced standing is competitive and centrally managed by the Naval Service Training Command. This program provides military uniforms and a subsistence allowance of $\$ 350 / \$ 400$ per month for Juniors/Seniors respectively while attending college. College Program students are required to take certain college courses and to undergo one summer training cruise of four weeks during the summer preceding their fourth year. Second-year College Program students who receive advanced standing or a scholarship must attend
the Naval Science Institute in Newport, R.I. for six weeks during the summer preceding their junior year. Upon commissioning, College Program students are required to serve at least three years on active duty.

## Naval Science Students

Any student in the College may take Naval Science courses. Naval Science students receive credit for satisfactory completion of accredited Naval Science courses but have no official status in the NROTC Program and receive none of the benefits provided to NROTC students.

## General Information

The Holy Cross NROTC Unit is composed of approximately 100 midshipmen. The battalion is divided into companies, and the overall leader is the Midshipman Battalion Commander, a fourth-year student who is chosen for outstanding leadership qualities. The battalion meets for drill or classroom instructional periods once a week. In addition, each year the battalion sponsors an active social program, which includes informal events, the Navy Marine Corps Birthday Ball, Dining In, Cotillion, various military and athletic excellence competitions, and field meets.

## Courses

Naval Science 100 - Naval Science Lab
Fall, spring
Naval Science Laboratory. One weekly two-hour laboratory. Emphasis is placed on professional training which is not of an academic nature. The laboratory is intended for topics such as drill and ceremonies, physical fitness and swim testing, cruise preparation, sail training, safety awareness, preparation for commissioning, personal finances, insurance and applied exercises in naval ship systems, navigation, naval operations, naval administration, and military justice. Other topics and special briefings will be conducted as determined by the Naval Service Training Command or the Professor of Naval Science. No degree credit; required of all midshipmen.
Naval Science 111 - Naval Orientation
Fall
An introduction to the customs, traditions, missions, rules and regulations of the Department of Defense and the United States Navy and Marine Corps. Topics include rank structure, uniform regulations, military law, terminology, ships and aircraft types, naval history, and present naval missions. No degree credit; required of all midshipmen; intended for first-year students.

Naval Science 112 - Naval Engineering
Fall
Detailed study of ships' characteristics and types including ship design, hydrodynamic forces, stability, compartmentation, propulsion, electrical and auxiliary systems, interior communications, ship control, and damage control. Included are basic concepts of the theory and design of steam, gas turbine, and nuclear propulsion. Also discussed are shipboard safety and fire fighting. No degree credit; required of all Navy option midshipmen; intended for third-year students.
Naval Science 113 - Naval Weapon Systems
Fall, spring
An introduction to the principles and behavior of electronic and electromagnetic systems to provide a foundational understanding of the interrelationships with naval combat systems. The topic and concepts explored pertain to a wide range of maritime applications, such as radar, sonar, communications, electro-optics, computer, missiles and electronics warfare systems. No degree credit; required of all Navy option midshipmen; intended for third-year students. Note: Fall 2005 will be the last time the course is taught in the fall.

A survey of U.S. Naval History from the American Revolution to the present, with emphasis on the Navy's role as an instrument of U.S. national security policy and foreign policy. Includes in-depth discussion of naval developments, key maritime strategies that have shaped the sea services, and naval contributions throughout various periods in American history, including major battles and campaigns in armed conflicts through the Gulf War. One unit; required of all midshipmen; intended for first-year students.

## Naval Science 141 - Navigation

Fall, spring
Practical piloting in restricted and open water to include discussions on tides, currents, electronic navigation, and celestial navigation theory. Coast Guard Navigation Rules, maneuvering board concepts, and a brief introduction to weather will also be covered. No degree credit; required of all Navy option midshipmen; intended for second-year students. Note: Fall 2005 will be the last time the course is taught in the fall.
Naval Science 142 - Operations Fall
The course includes discussions on Rules of the Road and basic ship handling practices. It will cover command and control and Naval Operations as they apply to each warfare platform. No degree credit; required of all Navy option midshipmen; intended for fourth-year students.

Naval Science 145 - Evolution of Warfare Alternate years in fall The course is designed to cover the causes of continuity and of changes in the means and methods of warfare during major periods of history. It addresses the evolution of strategic principles and the influence of economic, moral, psychological, political and technological factors and strategic thought. The course also examines the interrelationships between technological progress and military changes in rendering obsolete the successful strategies, policies, doctrines and tactics of the past. No degree credit; required of all Marine option midshipmen.

Naval Science 151 - Organizational Management Fall
This course focuses on the theoretical and practical concepts of leadership and management. It includes discussions of the principles and processes required of managers including: planning, organizing, controlling, motivation, communication, and decision making. Examples from both general business and the Naval establishment are used. The social, ethical and moral responsibilities of managers are also discussed. One unit; required of all midshipmen; intended for second-year students.

Naval Science 155 - Amphibious Doctrine Alternate years in fall Amphibious Doctrine is, at its core, a study of the evolutionary development of a unique form of armed engagement, i.e., the contested transition of military power from sea to land. Beginning with studies of selected examples of pre-20th-century landings, the course uses the World War I landing at Gallipoli as the turning point in methodology. Study then progresses through World War II and the Korean War to the present. Throughout, the increasing complexity and incredible detail of amphibious operations is made evident. No degree credit; required of all Marine option midshipmen.

Naval Science 352 - Leadership and Ethics
Spring
This course focuses on the moral and ethical responsibilities of a successful military officer. It explores the fundamental concepts of western moral traditions and ethical philosophies, and examines conflicts of moral principles, principles of justice, just war theory, and conduct of war, among other areas. It includes case studies and ethical dilemmas and moral reasoning in a military setting. This capstone course, in the NROTC curriculum, builds on and integrates the professional competencies developed in prior course work and professional training. No degree credit; required of all midshipmen; intended for fourth-year students.

## Philosophy

Joseph P. Lawrence, Ph.D., Professor
Jeffrey Bloechl, Ph.D., Associate Professor
Lawrence E. Cahoone, Ph.D., Associate Professor
Predrag Cicovacki, Ph.D., Associate Professor
Christopher A. Dustin, Ph.D., Associate Professor
William E. Stempsey, S.J., M.D., Ph.D., Associate Professor and Acting Chair
Karsten R. Stueber, Ph.D., Associate Professor
Jeffrey A. Bernstein, Ph.D., Assistant Professor
Shelby T. Weitzel, Ph.D., Brake-Smith Assistant Professor in Social Philosophy and Ethics
May Sim, Ph.D., Visiting Associate Professor
Maria Granik, Ph.D., Visiting Assistant Professor
James John, Ph.D., Visiting Assistant Professor
Philosophy is concerned with fundamental questions about the nature of reality; the foundations of science, ethics and art; and the nature and scope of human knowledge. Philosophy is actually the meeting place for all disciplines, for any discipline becomes philosophical once it begins seriously to examine its own methodology and fundamental presuppositions. The study of philosophy is therefore recommended to all students, regardless of their major.

Philosophy involves both systematic forms of inquiry and a prolonged reflection upon its own history. For its majors, minors and all students interested in deepening their liberal arts education, the department offers courses in the history of philosophy that span the entire tradition from the pre-Socratics to the philosophers of our own century. These historical courses are best pursued in conjunction with courses that cover the principal areas of philosophical inquiry (Metaphysics, Ethics, Epistemology, and Aesthetics). Philosophy is much more than the acquisition of a certain kind of knowledge. It is the ability to think reflectively and to raise questions about problems that lie at the root of what might appear self-evident.

Courses exclusively reserved for first-year students are all sections of Introduction to Philosophy (Phil 110). Students are permitted to take only one course at this level. Philosophy 120 (Introduction) is for second-year students only.

The department offers both a major and a minor program that combines necessary structure with the freedom to follow an individually oriented course of study.
Beginning with the Class of 2008: The minimum requirement for a major is 10 semester courses in philosophy. All majors are required to complete the following courses: 1) Either Ancient (225) or Medieval Philosophy (230); 2) Either Early Modern (235) or Modern Philosophy (241); 3) Either Ethics (204) or Foundations of Ethics (207); 4) Either Metaphysics (201) or Problems in Metaphysics (304); 5) Either Theory of Knowledge (209), Philosophy of Mind (261), Philosophy of Language (262) or Philosophy of Science (271); Either Symbolic Logic (215) or Logic and Language (242).

In addition to these courses, students must take at least two advanced ( 300 -level) seminars. Students are strongly encouraged to satisfy requirements 1 ) through 6) as early as possible within their program of study.

The minimum requirement for the minor is six semester courses in philosophy. All minors are required to complete the following courses: 1) Either Ancient, Medieval, Early or Modern Philosophy; 2) either Metaphysics, Ethics, or Foundations of Ethics; 3) at least one advanced 300-level seminar.
For the Classes of 2006, 2007 and 2008: The minimum requirement for the minor is six courses in philosophy. Of these, at least one has to be an advanced (300-level) seminar.

The minimum requirement for a major is 10 semester courses in philosophy; the maximum is 14 . (Double majors take no fewer and no more than 10 courses in philosophy.) Each major must take a course in logic.

Each major must take a course in logic. Majors are also required to take courses in at least three of the following four areas: 1) Metaphysics, 2) Epistemology, 3) Aesthetics, 4) Ethics. In addition, majors must take three courses that will provide an overview of the major periods in the history of philosophy, (Ancient, Medieval, Early Modern, Modern and Contemporary).

Minors in philosophy are required to take a minimum of six courses in philosophy. Of these, at least one has to be at an advanced (300) level. Courses should be selected in consultation with a faculty advisor in philosophy.

Courses fulfilling these requirements may be taken at either the intermediate or the advanced level. As a general rule, majors are urged to build a strong foundation of intermediate courses before progressing to the advanced courses. Majors are required to complete at least three courses at the advanced level.

In addition to a wide range of regular courses and seminars, the Department offers tutorials and other opportunities for independent study. Accomplished students are urged to complete their studies by writing a fourth-year thesis. The Fourth-Year Thesis in Philosophy comprises a semester-long project of concentrated research geared toward the production of a substantial piece of written work. It provides fourth-year majors with the opportunity to explore a specialized interest they have developed over the course of their studies. The principal arguments and conclusions of this paper will be publicly presented at the end of the semester.

Faculty and students together benefit from regular departmental colloquia and the lively exchanges initiated by the Philosophy Club, which is open to all interested students. In addition, membership in the Holy Cross Chapter of the National Honor Society in Philosophy, Phi Sigma Tau, is available to those who have a strong academic record, participate regularly in philosophical colloquia, and demonstrate a desire and ability to philosophize. Students are encouraged to compete for two essay competitions, the Strain Gold Medal and the Markham Memorial Prize.

## Courses

## Introductory Courses

## Philosophy 110 - Introduction to Philosophy <br> Fall, spring

In a certain way, philosophy needs no introduction. Each of us has had moments of wonder: "Why do we exist?" "Why is there so much suffering in the world?" "Why does the world itself exist?" This onesemester course for first-year students helps strengthen that sense of wonder by giving the student insight into what some of the greatest thinkers have had to say about these questions. Readings from Plato, Aristotle, Aquinas, Descartes and Kant. One unit.

Philosophy 120 - Introduction to Philosophy
Fall, spring
This course is identical to Philosophy 110, but is open only to second-year students. Students who have taken Philosophy 110 many not take this course. One unit.

## Intermediate Courses

## Philosophy 201 - Metaphysics

Annually
Aristotle described metaphysics as the "science which takes up the theory of being as being and of what 'to be' means taken by itself." Before and since Aristotle, the meaning and significance of metaphysics has been in dispute. While some thinkers have dismissed metaphysics as meaningless speculation, others have held it to be the center of Western philosophy. Using primary texts of classical and contemporary writers, this course studies the origins of metaphysics in ancient Greece, major developments of metaphysical thinking, and contemporary challenges to metaphysics. One unit.

A study of moral philosophy with a twofold aim: (1) to give students an appreciation of the important historical and theoretical developments in moral philosophy; (2) to help students to think, write and speak clearly about important moral issues of our time. Examines both the thought of important Western philosophers such as Aristotle, Immanuel Kant, and John Stuart Mill, and topics of contemporary concern in personal and social ethics. One unit.

## Philosophy 205 - Ethics and the Natural World

Alternate years
"Environmental ethics" poses a philosophical as well as a personal challenge to each of us. Moral theories tend to focus on the problem of how we treat one another. Our values tend to be human-centered. But current events suggest that now, more than ever, there is an urgent need for us to adopt some kind of ethical stance toward the natural world, one that does not regard our own (human) interests as the ultimate standard of value. How are we to respond to that need? In what sense is the "environment" a matter of moral concern to us? What is the "value" of nature? Such questions demand that we re-examine, not only our fundamental conceptions of nature, but our basic understanding of ethics as well. These are the problems we shall struggle with in this course, as we try to come to grips with the issues that arise for us, as human beings in modern society, through our involvement with the natural world. One unit.

## Philosophy 207 — Foundations of Ethics

Annually
Considers various challenges to the claims of morality, and whether and how moral philosophy can meet these challenges. Special topics include: the nature and justification of an ethical life, the limits of practical reasoning, the subjectivity vs. the objectivity of value, relativism, conflicts of obligation, the idea of moral "truth," and the sources and ultimate value of morality itself. Examines how these issues come to life in classical texts, and how they are treated in recent philosophical literature. The goal is to understand the foundations of morality (if there are any), and to gain insight into what is perhaps the most striking thing about human life-the fact that we have values. One unit.

Philosophy 209 - Theory of Knowledge
Annually
Do you know that you are not a brain in a vat being force-fed experiences by an evil scientist? In this course we will consider Descartes' skeptical arguments that we can't really know whether the world is the way it appears to us. These skeptical arguments will lead us to consider what knowledge is, whether "knowledge" means the same thing in the philosophy classroom as it means outside it, and what justifies our beliefs. Writings of contemporary analytic philosophers will be read and discussed. One unit.

## Philosophy 215 - Symbolic Logic

Alternate years
An introductory study of the formal structure of reasoning patterns such as deduction. Includes an introduction to formal languages, sentential calculus, predicate calculus, and an investigation into logic's value and limits. One unit.

Philosophy 224 - Contemporary Continental Philosophy
Alternate years
Focuses on a theme or question of general scope within continental European philosophy since Ni etzsche. Topics may include subjectivity, historical consciousness, technology, and plurality. Philosophical approaches may include phenomenology, hermeneutics, existentialism, psychoanalysis, the Frankfurt School, and post-structuralism. One unit.
Philosophy 225 - Ancient Philosophy Fall
Addresses some Greek conceptions of desire, beginning with Sophocles' Oedipus the King. The discussion is centered on such problems as the relationship between human beings and nature, and between the human and the divine. Discusses different approaches to love, passions and the soul in Plato's Symposium and Phaedrus. Investigates the relationship between temporality and eternity in Plato's theory of knowledge, happiness, virtue, and the nature of friendship are analyzed in Aristotle's Nicomachean Ethics. Finally, Epictetus' Handbook shows how such concepts as dependency and autonomy play a major role in the stoic interpretation of desire. One unit.
Philosophy 230 - Medieval Philosophy
Spring
A study of selected medieval thinkers such as Augustine, Boethius, Dionysius, Anselm, Bonaventure,

Aquinas, Scotus, and Ockham. The birth of scholasticism, an analysis of this philosophical movement in the 13th century, and its decline are presented. One unit.

## Philosophy 235 - Early Modern Philosophy

Fall
A study of the origins of modern philosophy: Descartes' turning towards the subject; his attempt at a justified method guided by the ideal of mathematical certainty; his influence on the development of European rationalism, Spinoza, Leibniz. Equal attention will be given to empiricist philosophers such as Bacon, Hobbes, Locke, Berkeley, and Hume and their approaches to philosophy and science. One unit.

Philosophy 241 — Modern Philosophy
Spring
A study of the later development of modern philosophy including Kant's new evaluation of metaphysics, epistemology, the nature of the sciences and morality and the idealist thought of Fichte and Hegel. Attention also to the thought of those opposing idealism, especially Marx and Kierkegaard. One unit.
Philosophy 242 - Logic and Language Fall
This course is an introduction to the $20^{\text {th }}$ century analytic philosophy and philosophy of language, which to a large part is guided by the conviction that traditional philosophical problems are based on linguistic and logical confusions. The course will familiarize students with the formal languages of modern sentential and predicate logic, whose development was so important for the philosophical thinking within this tradition. It will reflect on the importance of language for understanding the world and will investigate related semantic concepts such as meaning, reference and truth. One unit.

## Philosophy 243 - American Philosophy

Alternate years
A survey of the beginnings and development of American philosophic thought from the colonial period to the present. Detailed discussion of the work of Emerson, Peirce, and James and of important movements such as transcendentalism, pragmatism and analytic thought. One unit.

## Philosophy 245 - Phenomenology

Alternate years
Explores the motivation and the methods of phenomenological philosophy. Focus is on Husserl's development of phenomenology as a "rigorous science," and its critical revision. Topics include the relation of Husserl's "transcendental" project to the classical metaphysical tradition, the distinction between "pure" and "applied" phenomenology, the idea of a phenomenological psychology, and the influence of phenomenology in the philosophy of art. Readings include works by Husserl, Sartre, Merleau-Ponty, and others. One unit.

## Philosophy 246 - Philosophy and Literature

Alternate years
Explores the relationship between philosophy and literature. Reveals the enormous impact of philosophy on literary texts and tries to show how philosophy is present in all forms of intellectual life. Also tries to take seriously literature's claim to be doing something that philosophy itself cannot do. The authors chosen vary, but include such figures as Shakespeare, Goethe, Nietzsche, Thomas Mann and Proust. One unit.

## Philosophy 247 - Environmental Ethics

Alternate Years
The Western philosophical ethical tradition is anthropocentric, meaning that what is good or right is based upon the wants, needs and interests of humans. From such a perspective, the environment is regarded as a resource to be managed or exploited for the benefit of people. Many contemporary environmental ethicists carry on in this tradition, while others argue for an expanded ethical theory-one that takes into account the intrinsic values of animals, plants, species, ecosystems, and perhaps even the earth as a whole. In this course we will survey these different approaches with an eye to whether or not they are defensible. In doing so, we will consider issues such as animals rights, population control, the rights of future generations and wildlife restoration (e.g., prairies, forests). One unit.

## Philosophy 250 - Medical Ethics

Alternate years
Examines topics of current interest in biomedical ethics, and the role moral philosophy plays in public
debate about controversial issues. Aim is to help students think, speak, and write clearly about these issues. Discusses moral justification and an overview of several types of ethical theory. Considers such issues as the physician-patient relationship, truth-telling and confidentiality, informed consent, reproductive technologies, abortion, the right to die, euthanasia and assisted suicide, the AIDS epidemic, human genetics, and justice in the distribution of health care. One unit.
Philosophy 254 - Philosophy East and West
Alternate years
By exploring Greek texts from the Pre-Socratics to Plato in relationship with the Sanscrit Upanishads, this course attempts to reveal the common metaphysical root of Western and Eastern traditions. Christian and Buddhist texts are also investigated in an attempt to show how the sharp polarity between Eastern and Western thought emerged. One unit.
Philosophy 260 - Philosophy of Art
Alternate years
By reflecting on what philosophers have said about art, this course investigates the idea that art itself performs a philosophical, perhaps even a moral, function. Art is supposed by many to have the power to reveal something, and to be in some way "good" for us. In considering whether this is so, we have to confront two basic questions. The first is: Are there any "truths" about art (about what art is, about the purpose of art, about what makes art good or bad, etc.)? The second is: does art really reveal "truths" (What kind of truths? Truths about what? Can these truths be rationally articulated? If not, why should we take art seriously?) We shall concentrate on these, and related questions. Readings from Plato, Kant, Hegel, Nietzsche, Freud, Heidegger, Kandinsky, and Iris Murdoch. One unit.

## Philosophy 261 - Philosophy of Mind

Annually
Questions concerning the nature of the mind and its relation to the body or questions about the essential capacities of human beings distinguishing them from plants, animals, and machines are raised. Different traditional and contemporary themes about the nature of the mind are discussed critically. Emphasizes topics such as the mind-body problem, the nature of consciousness, the explanation of action, and the problem of intentionality. One unit.

## Philosophy 262 - Philosophy of Language

Alternate years
At the beginning of this century philosophy underwent, with the so-called "linguistic turn," yet another Copernican revolution. Traditional philosophical problems were supposed to be solved or dissolved through an analysis of the meaning of linguistic expressions. This course tries to evaluate this kind of philosophizing through a systematic analysis of the philosophical project of a theory of meaning in its historical development. Readings include texts of Frege, Carnap, Quine, Davidson, Dummett, and Wittgenstein. One unit.

## Philosophy 264 — Philosophy of History

Alternate years
Focuses on the growth of historical consciousness in the modern epoch, although it may also give attention to such Christian thinkers as Augustine. Emphasizes the contrast between the boldly progressive vision of Hegel, which celebrates scientific culture as the goal of history, and the more traditional vision of Vico (the Italian philosopher), which embodies a cyclical moment and defines historical culture more in terms of poetry than of science. Other authors typically read include Kant, Herder, Burckhardt, Nietzsche, Löwith, and Collingwood. One unit.
Philosophy 265 - Political Philosophy Fall
Political philosophy addresses the questions of how and toward what end ought human beings live together, what a just and good society would be, and what makes power legitimate? These questions are pursued through a reading of the history of Western political thought, including the work of Plato, Aristotle, Machiavelli, Hobbes, Locke, Rousseau, Marx, and J.S. Mill. Recent liberal theory also examined, focusing on the justice of welfare spending and the proper limits on government, using for example the work of John Rawls and Robert Nozick. One unit.
Philosophy 267 - Philosophy of State and Law
Spring
Examines the nature of liberal democratic politics in its relation to morality. The central question is:
what are the rightful limits on and concerns of the government, law, and politics of a "liberal," that is, free and democratic, society? "Neutralist" liberals argue that maximum individual liberty requires government neutrality toward particular moral ends or notions of the good life. Others, especially "communitarians" and "civic republicans," fear that neutrality undermines both morality and community, and argue that government must promote both through endorsing some notion of the good life. What is the proper balance of liberty and morality? This question pursued through the work of a number of important, most recent and American, political theorists. One unit.

## Philosophy 269 - Philosophy of Law

Alternate years
Examines the nature of law and the place of law in human society. Considers the history of rule by law and reflects upon its value. Theories of law and of the relation of law to morality are explored. The course draws upon case histories and jurisprudential readings. It is not an introduction to legal reasoning, but a probe of the philosophical issues that underlie such legal concepts as equality, freedom of speech, evidence, obligation, rights, punishment, and justice. One unit.

## Philosophy 271 — Philosophy of Science

Alternate years
An examination of the structure, function, value, and limits of science. Specific topics include the structure of scientific explanation, the role of experimentation, the nature of scientific progress, and the nature of scientific values. This course also investigates whether the activities of science are both rational and ethical. One unit.

Philosophy 272 — Philosophy of Biology
Alternate years
This course examines biology as related to the other physical sciences and in terms of its philosophical foundations and methodology. Attention is given to the classical mechanism vitalism controversy, to issues in evolutionary theory and to certain contemporary controversies, e.g., socio-biology, evolution, environmentalism. One unit.

## Philosophy 273 - Philosophy of Medicine

Alternate years
The philosophy of medicine includes the metaphysical, epistemological and methodological aspects of medical practice and medical research. This course explores some of the theoretical and conceptual issues that form the basis for medical knowledge and thus influence the practice of medicine. Topics include the nature of health and disease, normality and pathology, the assumptions and goals of medicine, changes in the theoretical structure of medicine over time, the nature of medical knowledge, and methods of reasoning in medical research and practice. One unit.

## Philosophy 274 - Philosophical Anthropology

Alternate years
Is there such a thing as human nature or are we just the result of history and culture? Inquiry begins with reading of ancient Greek authors, who address the issue by reflecting on the human condition with respect to nature at large and the political world in particular. Focus turns to modern and contemporary authors, who allow us to examine such issues as human contingency, the possibility of action, and the roots of violence and aggression. One unit.

## Philosophy 277 - Philosophical Perspectives on Women

Alternate years
Surveys the classic literature of Western philosophical views on women and the feminist response to it. Attention to feminism as a method of analysis as well as to representative issues whose philosophical significance has been identified by feminism, e.g. gender, friendship, dependence. One unit.
Philosophy 278 - Philosophers on War and Peace
Alternate years
Explores some major philosophical issues concerning war and peace viewed through the classic writings of Kant, Clausewitz, Lenin, William James, Tolstoy, Gandhi and contemporary authors. Emphasis is on the questions of the possibility of eliminating war, the morality of war both conventional and nuclear, and the moral problems involved in maintaining a policy of nuclear deterrence. One unit.

## Philosophy 282 - Philosophy of Religion

Alternate years
This course will be divided into two parts, both of which confront concepts and names for God with
experiences of evil. The first part will study the tradition of theodicy, with attention to Augustine, Boethius, Leibniz and contemporary liberation theology. The second part will look closely at the experience of extreme evil in genocide. Readings from P. Levi, E. Eiesel, E. Levinas, P. Celan and post-Holocaust "death of God" thinking. One unit.

## Philosophy 285 - Philosophy of Mythology

Alternate years
Examines both philosophy's ground in mythical thinking and the tension that arises between the two spheres. Themes vary from semester to semester and will generally include, in addition to compendiums of Indian or Greek mythology, such authors as Plato, Vico, Schelling, Hegel, and Goethe. One unit.
Philosophy 286 - Classicism in Art and Thought
Alternate years Enlightenment culture is supposed to have liberated itself from ancient world-views. That is how "modernity" is defined. But it still expresses itself in classical terms. What is the meaning of this? Why do we remain wedded to a way of picturing the world which we claim to have progressed beyond? There are lots of superficial explanations. This course searches for a deeper understanding of what "classicism" is all about, and goes on to explore its recurrent manifestations in Enlightenment art and thought. Themes include order and disorder, freedom and desire, harmony and dissonance, individuality and the whole, unity and disunity, tragedy and reconciliation, nature and reason, and how we picture of ourselves in relation to the broad structure of reality. One unit.

Philosophy 287 - The Philosophy of Architecture
Alternate years
More than any other art, architecture shapes our environment and the way we live. This raises serious and difficult questions about what architecture is and does, about the status of architecture as art, about the truths (if any) which it expresses, about the relationship between architectural forms and the character of human life, and about what it means to dwell. Such questions lie at the intersection of art and philosophy. In addition to readings from traditional and contemporary literature in aesthetics and architectural theory, this course reflects on these issues by looking at and responding to architectural examples. It examines the philosophy of architecture by studying architecture philosophically. One unit.

## Philosophy 288 - Death

Alternate years
Explores the antinomy of reason that is occasioned by the phenomenon of death, i.e. do we or do we not fully "die" when we die?, and the transformative rather than theoretical: how can we ourselves most effectively prepare ourselves for the deaths we will one day encounter? The image of Socrates, who faces his own death with supreme courage, serves as a model for the "philosophical" relationship to death. The readings for this course vary, but typically include Heidegger's Being and Time and Plato's Phaedo. Texts from Eastern Philosophy also play a prominent role. One unit.

## Philosophy 289 - Ethical Issues in Death and Dying

Alternate years
The ethical problems involved in caring for the terminally ill are among the most controversial issues of our day. This course examines ethical, philosophical, and public policy dimensions of death and dying. Topics include the definition of death, truth-telling with dying patients, suicide, euthanasia, deciding to forgo life-sustaining treatment, decisions on behalf of children and incompetent adults, the debate about futile care, and public policy issues. One unit.
Philosophy 290 - Knowledge of the Self
Alternate years
Self-reflection and self-awareness are furthermore moral imperatives of our contemporary culture. Yet how is it possible that the self can at the same time be the object and subject of knowledge? This course addresses the central ontological and epistemological problems associated with the problem of selfknowledge. Authors to be studied include Descartes, Hume, Kant, Wittgenstein, Sartre, James, and Shoemaker. One unit.

## Advanced Courses

Philosophy 302 - Philosophy of Psychology
Alternate years
Addresses long-standing philosophical issues concerning the foundations of psychological research. It
discusses questions such as, can a machine think? Can psychology be reduced to neuroscience? To what extent is human behavior similar to animal behavior? How adequate are biological accounts of "abnormal" behavior? And, what is consciousness and can it be explained from a scientific perspective? One unit.

## Philosophy 303 - Philosophy of Social Science

Alternate years
Is it possible to study and explain human actions and human affairs using the methods of the natural sciences? Or does the study of human beings require its own methodology because human beings have thoughts, a free will, and can behave rationally? This course tries to find an answer to these questions by studying the most prominent responses to the above query provided by philosophers, historians and social scientists. Readings include works by authors such as Weber, Geertz, Hempel, Collingwood, Davidson, Winch, Marx and Habermas. One unit.

## Philosophy 304 — Problems in Metaphysics

Alternate years
Contemporary metaphysics addresses questions about the nature of reality such as: What is time? What are we? Is consciousness a physical brain process, or something non-physical? This seminar will take up some of these questions, readings are both historical and contemporary. One unit.

## Philosophy 305 - Science and Values

Alternate years
Science is usually seen in contemporary society as a privileged route to knowledge, and as value-neutral in its pursuit of truth. This seminar is intended to stimulate thought about the mutual influence of the natural sciences and human values. It is not a course in "applied ethics" or the ethics of technology. Rather, its goal is to come to a deeper appreciation of the conceptual underpinnings of scientific knowledge and how values are essential elements of these conceptual underpinnings. The seminar will be a study of classic texts and contemporary developments in the philosophy, history, and sociology of natural science. Both theoretical aspects and historical examples of how scientific facts and theories are constructed are discussed. A central theme is the debate about realism vs. constructivism in the philosophy of science. This includes a consideration of objectivity and subjectivity in the realms of both fact and value. Also discussed is the view that science offers the best description of reality and the different types of "scientism," and the overvaluing of science in comparison with other ways of learning about the world. One unit.

## Philosophy 306 - Problems in Moral Philosophy

Alternate years
This seminar addresses the relationship between theories of the mind and corresponding political theories. Among the course reading are Plato's Republic, where the association between the structure of the soul and the structure of different cities is explicit, and Aristotle's Nicomachean Ethics, where the study of the soul's structure is functional to the analysis of happiness in the polis. The second part of the seminar addresses two modern paradigms: Hobbes' Leviathan and Rousseau's Second Discourse on the Origin of Inequality. Two radically different theories are discussed which address human nature, the possibility of happiness, and the power of emotions while distinguishing themselves from their ancient models. One unit.

Philosophy 308 — Problems in Epistemology
Alternate years
Prominent in contemporary theory of knowledge is the attack on "foundationalism," the belief that claims to knowledge can receive ultimate or philosophical justification. Foundationalism has been central to the mainstream of philosophy since Descartes, although arguably it is as old as Plato. Thus "antifoundationalism" is a deep challenge to philosophy. This course examines the antifoundationalist critique, and the attempt to save philosophy from it, focusing primarily on the work of Richard Rorty, Michael Williams, and Hilary Putnam, but with selections from a number of earlier philosophers, including James, Nietzsche, Wittgenstein, Quine, and Heidegger. One unit.
Philosophy 316 - Problems in Aesthetics
Alternate years
Selected issues or texts in the philosophy of art explored in depth. One unit.

Philosophy 334 - Hermeneutics
Alternate years
A study of the theory of interpretation as constitutive of human knowing and action. Examines classical and contemporary theories about interpretation, but also demands that the participants enter the practice of hermeneutics in an effort to understand selected difficulties of the modern and contemporary world. One unit.

## Philosophy 350 - Pre-Socratic Philosophy

Alternate years
A study of the origin of Western philosophy and science before Socrates. It investigates the relationship between myth and philosophy, the development of various schools of philosophy (Pythagoreans, Eleatics), and concludes with a discussion of the sophists. Emphasis is placed upon the study of the texts of Pre-Socratic philosophers and the interpretations of modern scholars. One unit.
Philosophy 354 - Plato Fall
"Platonism" has fallen on hard times in the contemporary philosophical marketplace. As a way of thinking about ethical, epistemological, or metaphysical issues, it is seen as an enterprise which is more or less bankrupt. The goal of this seminar is to overcome the modern prejudice against Platonism by rereading Plato, and understanding what he really has to say. Do his works represent a coherent philosophical vision? If so, what does this vision offer us? One unit.

Philosophy 358 - Aristotle
Spring
"All human beings by nature desire to understand." Or so Aristotle claims, in the first sentence of his Metaphysics. The goal of this seminar is to understand this claim. What is Aristotle's conception of (our) "nature," and how is it related to his conception of reality as a whole? Is our nature most fully realized when our desire (to understand) is most fully satisfied? If so, what does this involve? What does it mean to be fully human? What does Aristotle think we ultimately discover in our attempt to understand the world? We shall pursue these questions, in depth, by exploring the fundamental connections be-tween-and the significant tensions within-Aristotle's Metaphysics, Physics, Ethics and Poetics. We shall ultimately focus on Aristotle's conception of tragedy, and the philosophical implications of the work of two tragic poets (Sophocles and Euripides). Attention is also be given to whatever seems to separate Aristotle's way of thinking and our own. One unit.

## Philosophy 362 - Augustine

Alternate years
This seminar introduces the thought of Augustine through study of some main works in relation to key themes in Greek philosophy (chiefly Plotinus) and Christian theology. Augustine's Confessions are generally read, but depending on the topical focus in a given year, this may be followed by study of his City of God, De Trinitate, or passages from other works. One unit.

## Philosophy 366 - Thomas Aquinas

Alternate years
A detailed study of selected texts of St. Thomas Aquinas with reference to other significant medieval figures. The focus is on understanding St. Thomas' thought both as an intellectual achievement in its own right and as part of a continuous tradition of philosophical and theological inquiry. Topics of special interest will include: the existence and nature of God, creation and the nature of reality, human and divine knowledge, as well as problems in ethics and politics. Late medieval Scholasticism involved a rediscovery of and sustained dialogue with Aristotelian thought. Thus, participants in this course will benefit from a prior knowledge of ancient Greek philosophy, although it is not a prerequisite for enrollment. One unit.
Philosophy 368 - Meister Eckhart
Alternate years
This course typically focuses on Eckhart's sermons (which he composed in German) rather than the more formal philosophical treatises (which he wrote in Latin). It is in the sermons where Eckhart's mysticism is most pronounced. As a result, they serve as an ideal basis for evaluating the relationship between philosophy and mysticism. In addition, the question will be raised to what degree Eckhart's thinking
reveals the essence, not only of Christianity, but of religion as such. In this regard, Eckhart commentaries from Buddhist and Islamic thinkers may also be considered. One unit.

## Philosophy 370 - Kant

Fall
A reading course in the primary sources, concentrating mostly on Kant's Critique of Pure Reason and Critique of Judgment. The reading and discussion focus on Kant's theory of knowledge, as well as his metaphysical, aesthetic, and anthropolical views. The approach is both historical and critical. One unit.
Philosophy 375 - Hegel
Spring
An in-depth study of the philosophy of Hegel. This will include a probing and testing of his positions on the nature of reality and his theory of knowledge. Emphasis is on the philosophy of history, the history of philosophy, the state, and religion, and on their contemporary relevance. One unit.
Philosophy 380 - Nietzsche
Alternate years
Friedrich Nietzsche is one of the archetypal modern masters. His notions of the "death of God," the "will to power," amor fati, the Dionysian and Apollinian, the overman and many others have entered the consciousness of the 20th century. His influence was (and still is) immense. The seminar is an in-depth study of Nietzsche's work. The discussion will be focused on the question of creation and negation, on nihilism and its overcoming, on the sense of morality and the criticism of Christianity. Nietzsche's books used in class are: The Gay Science, Thus Spoke Zarathustra, Beyond Good and Evil, Genealogy of Morals, Twilights of Idols, The Anti-Christ, and Ecce Homo. One unit.
Philosophy 383 - Heidegger
Alternate years
This course consists of a reading and discussion of some of the major works of Heidegger. Attention is given to his criticism of Western philosophy, his understanding of truth, his teaching on the meaning of being human (Dasein), his pursuit of the question of the meaning of Being, and his critique of technology. One unit.

## Philosophy 391 - Wittgenstein

Alternate years
An intensive reading course focusing on Wittgenstein's early Tractatus Logico-Philosophicus and his late Philosophical Investigations. Topics of special interest include the author's views on philosophy, the constitution of linguistic meaning, truth, and the problem of solipsism. The course also tries to evaluate Wittgenstein's contribution to and relevance for contemporary philosophy. One unit.
Philosophy 400 - Tutorials
Fall, spring
Independent study of various topics of special interest to individual students and faculty directors. Normally, tutorials will only be offered for topics that are not covered by regularly offered courses. One unit.
Philosophy 497 - Fourth-Year Thesis
Fall, spring
The fourth-year thesis should in some way represent the culmination of a student's work in philosophy, drawing on previous background and developed interests. It is therefore best undertaken in the spring semester of the fourth year. A student who is interested in writing a thesis must submit to the Chair of the Department a brief prospectus ( $2-4$ pages) describing the proposed topic. This prospectus should clarify the problems, issues, or themes which the thesis will address, and present an initial plan of research. Ideally, the prospectus would provide at least a rough outline for the project as a whole. It should include a preliminary bibliography. The deadline for submitting a prospectus is the Monday following the Thanksgiving vacation. Once the prospectus is submitted, the Chair will review it in consultation with the prospective advisor who will approve the prospectus or suggest revisions. It is recommended that a student interested in submitting a prospectus meet with a potential advisor well in advance of the deadline. The prospectus is meant to ensure that the student has a coherent and manageable topic. It also ensures that substantive work on the thesis itself can begin at the outset of the spring semester. Equipped with an initial reading list, the student should be able to undertake preliminary research over the Christmas vacation. The completed thesis is to be submitted to the advisor and two additional readers (one of whom may be from outside the department) not later than the last regular day of classes. The readers will be chosen by the student together with the advisor and Department Chair. Shortly after the
thesis is submitted (usually during the study period), the student will have the opportunity publicly to present, and to defend, his or her work. After the defense, the advisor (in consultation with the readers) will determine a letter grade for the thesis. One unit.

## Physics

Randy R. Ross, Ph.D., Professor
Janine Shertzer, Ph.D., Anthony and Renee Marlon Professor in the Sciences
Robert H. Garvey, Ph.D., Associate Professor
Matthew B. Koss, Ph.D., Associate Professor
Timothy M. Roach, Ph.D., Associate Professor
De-Ping Yang, Ph.D., Associate Professor and Chair
Tomohiko Narita, Ph.D., Assistant Professor
Paul K. Oxley, Ph.D., Assistant Professor
Emily Maher, Cand. Ph.D., Visiting Instructor
The Physics Department offers a flexible program of study in physics that may be designed to suit the individual needs of the student. The curriculum leading to the bachelor degree in physics is intended to provide a thorough foundation in the principles of physics. With appropriately selected advanced courses, a student is well prepared for graduate study in physics, applied physics, engineering, medicine, or law, or for entry-level positions in research, business, teaching, and other fields.

Students required to take a one-year course in General Physics as part of their academic program have two options: the traditional General Physics lecture course with the required laboratory or General Physics in Daily Life, which has interactive experiments integrated into the lecture. General Physics in Daily Life emphasizes the applications of physics to natural phenomena and devices of everyday life. Both sequences are calculus-based and satisfy the requirements for science majors, the premedical program, and ROTC.

The requirements for a major in physics consist of both physics and mathematics courses. Physics majors must take three semesters of calculus (Math 131, 132, and 241) or the equivalent. The required physics courses are General Physics 1, 2 with the laboratories (Physics 111,112, 113, 114) or General Physics in Daily Life 1, 2 (Physics 115, 116), Methods of Physics (Physics 221), Modern Physics with the laboratory (Physics 223, 225), Classical Mechanics 1 (Physics 342), Thermal Physics (Physics 344), Electromagnetic Theory (Physics 351), and Quantum Mechanics 1 (Physics 353). In consultation with their advisors, physics majors must choose at least two additional lecture courses and one advanced laboratory above the 200 level. A laboratory course is taken as a fifth course in any given semester. A minimum grade of C in General Physics 1, 2 or General Physics in Daily Life 1, 2 is required to continue in the major. Mathematics majors are not required to take Methods of Physics.

Advanced electives offered by the Department include Optics with the laboratory (Physics 231, 233), Electronics with the laboratory (Physics 234, 236), Classical Mechanics 2 (Physics 343), Quantum Mechanics 2 (Physics 354), Introduction to Astrophysics (Physics 355), and Experimental Solid State Physics (Physics 356). General Physics 1, 2 or General Physics in Daily Life 1, 2 are prerequisites for all physics courses above the 200 level; Multivariable Calculus (Math 241) and Methods of Physics (Physics 221) are prerequisites for all physics courses above the 300 level.

Programs of supervised research in theoretical or experimental physics (Physics 471, 472) are available for qualified physics majors. Students may also take Independent Study (Physics 461, 462) under faculty guidance to pursue topics of interest that fall outside the curriculum.

Two special academic programs may be of interest to Physics majors. The 3-2 Program in Engineering provides the opportunity to combine the study of physics with training in engineering. The Teacher Education Program leads to state licensure as a secondary school teacher of physics. Students interested in one of these programs should consult with the Department Chair and either the 3-2 Program Advisor or the Director of the Teacher Education Program.

A minor in physics is also offered for interested students. Physics minors must take two semesters of calculus (Math 131, 132) or the equivalent. The required physics courses are General Physics 1,2 with the laboratory (Physics 111, 112, 113, 114) or General Physics in Daily Life 1, 2 (Physics 115, 116), and Modern Physics (Physics 223). In consultation with their physics advisors, minors are required to choose three additional physics courses, two of which must be lecture courses above the 200 level.
Advanced Placement Credit: Students with AP credit in Physics do not receive credit toward the minimum number of courses required for the major or advanced standing in the Physics curriculum.

## Courses

## Physics 100 - Topics in Physics

Fall, spring
Recent offerings: How Things Work; Gravity and Science in Orbit; Light, Color, and Vision. Non-science majors only. One unit.

## Physics 101 - Introduction to Astronomy

Annually
Motions of celestial bodies; the sun, Earth and moon; other terrestrial planets; Jovian planets; asteroids and comets; nebular model for the origin of the solar system; stars and stellar systems; Milky Way galaxy; the universe and the big-bang model. Non-science majors only. One unit.

## Physics 102 - Introduction to Meteorology

Alternate years
Atmospheric properties; solar and terrestrial radiation; cloud types and their formation; thunderstorms, mid-latitude cyclones, anticyclones (low and high pressure systems) and tropical cyclones; forecasting; climate and climatic changes (ice ages); stratospheric ozone; optical atmospheric phenomena. Non-science majors only. One unit.

## Physics 111 - General Physics 1 <br> Fall

Kinematics in one and two dimensions; vectors; Newton's laws; work and energy; linear momentum and collisions; rotational motion; static equilibrium; oscillatory motion; gravitation; fluid mechanics; waves. Calculus-based. One unit.

Physics 112 - General Physics 2
Spring
Electric fields; electric potential; capacitance; DC circuits; magnetic fields; Faraday's law and inductance; AC circuits; geometric optics; wave optics; modern physics. Calculus-based. One unit.
Physics 113 - General Physics Laboratory 1* Fall
Taken concurrently with Physics 111. Overload. One-quarter unit.
Physics 114 - General Physics Laboratory 2*
Spring
Taken concurrently with Physics 112. Overload. One-quarter unit.

## Physics 115 - General Physics in Daily Life 1 <br> Fall

Kinematics in one and two dimensions; vectors; Newton's laws; work and energy; linear momentum and collisions; rotational motion; static equilibrium; oscillatory motion; gravitation; fluid mechanics; waves. Calculus-based. One and one-quarter units.

Electric fields; electric potential; capacitance; DC circuits; magnetic fields; Faraday's law and inductance; AC circuits; geometric optics; wave optics; modern physics. Calculus-based. One and one-quarter units.

## Physics 221 - Methods of Physics

Mathematical techniques needed for the study of physics at the intermediate and advanced level. Ordinary differential equations; vector calculus; partial differential equations; matrices; Fourier series; and complex variables. One unit.
Physics 223 - Modern Physics Fall
Special relativity; the particle aspects of electromagnetic radiation; the wave aspects of material particles; atomic structure; nuclear structure and reactions; elementary particles. One unit.

Physics 225 - Modern Physics Laboratory*
Fall
Millikan oil-drop experiment; gamma-ray spectroscopy and absorption; the Franck-Hertz experiment; measurements of e/m for the electron, Planck's constant, the hydrogen Balmer lines, the speed of light, and the Cavendish experiment. Taken concurrently with Physics 223 . Overload. One unit.

## Physics 231 - Optics

Alternate years in spring Fermat's Principle; laws of reflection and refraction; image-forming properties of mirrors and lenses; analysis of optical systems; interference; diffraction; thin films; polarization; scattering of light; optical spectra; lasers and holography. One unit.

## Physics 233 - Optics Laboratory*

Alternate years in spring Image formation by lens systems; spherical and chromatic aberrations; determination of refractive index, optical activity; diffraction and interference of light waves; spectrometer and polarimeter; lasers, holography and optical fibers. Taken concurrently with Physics 231. Overload. One unit.
Physics 234 - Electronics
Alternate years in spring
Kirchhoff's laws applied to DC and AC network analysis; the physics of semiconductors; properties of diodes and transistors; circuit applications including rectifiers, regulators, amplifiers, and oscillators; principles of feedback systems; operational amplifier circuits. One unit.

## Physics 236 - Electronics Laboratory*

Alternate years in spring AC and DC circuits; low- and high-pass filters; diode characteristics; rectifiers; transistor characteristics; multiple stage amplifiers with feedback; oscillators; operational amplifiers; TTL integrated circuits. Taken concurrently with Physics 234. Overload. One unit.

## Physics 342 - Classical Mechanics 1

Spring
Motion of a particle in one dimension, including the damped, forced harmonic oscillator; vector analysis; motion of a particle in two or three dimensions, including projectiles and motion under a central force; motion of a system of particles, including the two-body problem and coupled harmonic oscillators. One unit.

Physics 343 - Classical Mechanics 2
Alternate years
Rigid body rotation; statics; moving coordinate systems; mechanics of continuous media; generalized coordinates and constraints; Lagrangian and Hamiltonian dynamics. Prerequisite: Physics 342. One unit.

## Physics 344 - Thermal Physics

Spring
The laws of thermodynamics applied to various systems in equilibrium, including gases, magnetic materials, and solids; the concepts of temperature, heat, work, entropy, and the thermodynamic potential; reversible and irreversible processes. One unit.

## Physics 351 - Electromagnetic Theory

 FallThe electrostatic field and potential; divergence and curl of E-field; work and energy in electrostatics; special techniques for calculating potentials; E-fields in matter; the Lorentz force and Biot-Savart law; divergence and curl of B-field; magnetic vector potential; magnetostatic fields in matter; EMF and Faraday's law; Maxwell's equations. One unit.
ing the infinite square well, the harmonic oscillator, and the finite well/barrier; solutions of the threedimensional Schrödinger equation; the hydrogen atom; angular momentum and spin. Prerequisite: Physics 223. One unit.

## Physics 354 - Quantum Mechanics 2

Alternate years
Time-independent perturbation theory and applications including the fine structure of hydrogen, Zeeman effect, and Stark effect; the variational method; the WKB approximation; time-dependent perturbation theory and the emission/absorption of radiation; the adiabatic approximation; three-dimensional scattering with partial wave analysis. Prerequisite: Physics 353. One unit.

## Physics 355 - Introduction to Astrophysics <br> Alternate years

Celestial mechanics; spectra; solar physics; equations of stellar structure; thermonuclear reactions; stars and stellar systems; polytropes; stellar evolution; white dwarfs, neutron stars, and black holes; Milky Way galaxy; Hubble's law; active galactic nuclei; big-bang model. Prerequisite: Physics 223. One unit.

Physics 356 - Experimental Solid State Physics
Alternate years
Crystal structure; free-electron energy bands; semiconductors and metals; superconductivity; magnetic materials. Experiments include X-ray diffraction, optical spectroscopy, Mössbauer spectrometry, and resonance methods. Prerequisite: Physics 353 . One unit.

Physics 461, 462 - Independent Study<br>Annually<br>One unit each semester.

Physics 471, 472 - Undergraduate Research
Annually
Supervised research in theory or experiment. One unit each semester.
*Each of these laboratory courses is taken as a fifth course and, as such, is figured in the GPA, but does not count toward the 32 courses required for graduation.

## Political Science

Judith A. Chubb, Ph.D., Professor
David L. Schaefer, Ph.D., Professor
Hussein M. Adam, Ph.D., Associate Professor
Donald R. Brand, Ph.D., Associate Professor and Chair
Caren G. Dubnoff, Ph.D., Associate Professor
Stephen A. Kocs, Ph.D., Associate Professor
Denise Schaeffer, Ph.D., Associate Professor
Ward J. Thomas, Ph.D., Associate Professor
David C. Art, Ph.D., Assistant Professor
Loren R. Cass, Ph.D., Assistant Professor
Daniel P. Klinghard, Ph.D., Assistant Professor
Vickie Langohr, Ph.D., Associate Professor
B. Jeffrey Reno, Ph.D., Assistant Professor

Maria G. M. Rodrigues, Ph.D., Assistant Professor
Bruce G. Bunke, Ph.D., Lecturer
George M. Lane, M.A., Lecturer, Ambassadorin-Residence
David Lowenthal, Ph.D., Lecturer
Joshua Rovner, Cand. Ph.D., Lecturer
Ashraf el Sherif, Cand. Ph.D., Lecturer
Political science is the study of government, including the empirical study of American and foreign political regimes; theoretical approaches that attempt to explain political action in its various forms, both within nations and among them; and the study of philosophic texts that address the questions of the nature of justice, the best way of life, and the best political order.

Students majoring in political science are required to take the department's introductory course in each of the four sub-fields. We strongly encourage students to complete all four introductory courses by the end of the sophomore year. In addition to these introductory courses, political science majors must take at least six upper-division courses for a minimum total of 10 courses and a maximum of 14 to complete the major. Of the six upper-division courses, at least one must be in American government, one in political philosophy, and one in either international relations or comparative politics. For outstanding students, there is the possibility of undertaking a two-semester honors thesis in the senior year. Majors are also strongly encouraged to take courses in related fields like history, economics, and sociology. Proficiency in a modern foreign language is highly recommended as well.

The study of political science is valuable for non-majors as well as for majors. Today, just as in the ancient republics, every citizen has a duty to learn about the workings of his/her country's political system and of other political regimes as well as that of the international system so as to make informed judgments regarding issues of domestic and foreign policy. The citizen needs in addition a developed capacity to understand and evaluate the principles underlying the various political regimes, ways of life, and policy choices.

Beyond helping to promote intelligent and active citizenship, a political science major provides good training for careers in teaching, law, politics, government service, business, journalism, the armed forces, and international organizations. Finally, apart from a student's ultimate career plans, the study of political science helps to develop powers of reasoning, critical and analytical skills, and competence in oral and written expression.

Membership in Pi Sigma Alpha, the national student honor society in political science, is open to students with distinguished academic records.
Advanced Placement Credit: Students with a score of 5 in American Politics and Government and/ or Comparative Politics and Government receive advanced standing in the curriculum and progress toward the minimum number of courses required in the major.

## Courses

## Introductory Courses

## Political Science 100 - Principles of American Government

Fall, spring
Provides an introductory overview of American government through study of the principal public documents, speeches, and constitutional law cases that define the American political tradition. By tracing the development of U.S. political institutions from the founding to the present, the course examines the ways in which American political ideals have become embodied in institutions as well as the ways in which practice has fallen short of these ideals. The course introduces students to contemporary ideological and policy debates, and prepares them for the role of citizen. American Government. One unit.
Political Science 101 - Introduction to Political Philosophy
Fall, spring A Concise survey of the history of political philosophy. Intended to introduce students to some of the major alternative philosophic answers that have been given to the fundamental questions of political life, such as the nature of the good political order and the relation of the individual to the community. Authors to be studied include Plato, Aristotle, Machiavelli, Hobbes, Rousseau, Marx and Nietzsche. Political Philosophy. One unit.
Political Science 102 - Introduction to Comparative Politics
Fall, spring
A comparative analysis of political processes and institutions in Western liberal democracies, Communist and post-Communist states, and developing nations. The course focuses on alternative models of economic and political modernization and on the causes of and prospects for the current wave of democratization throughout the world. Comparative Politics. One unit.
Political Science 103 - Introduction to International Relations
Fall, spring
Introduces students to major theories and concepts in international politics and examines the evolution of the international system during the modern era. Principal topics include: the causes of war and peace, the dynamics of imperialism and post-colonialism, the emergence of global environmental issues, the nature and functioning of international institutions, the legal and ethical obligations of states, and the international sources of wealth and poverty. International Relations. One unit.

## Upper-Division Courses

Political Science 201, 202 - Constitutional Law 1, 2
Annually
A two-semester course that examines the ways in which the Constitution has been defined over time by the Supreme Court. Topics include formation of the Constitution; separation of powers, judicial review, congressional and presidential authority; citizenship, suffrage and representation; and individual liberties. Emphasis is placed on the nature of legal reasoning and judicial process. American Government. Prerequisite: Political Science 100 or permission of the instructor. One unit each semester.
Political Science 203 — Judicial Behavior
Fall
Concentrates on two central questions: 1) how and why judges decide cases as they do; 2) how judges should decide cases. Do judges decide cases on the basis of which litigant presents the stronger factual evidence and the best controlling precedents? Do they rule according to what "the law says?" Or are the evidence and controlling precedents sufficiently ambiguous to allow for the influence of factors external to the law, and if so, what are these factors? Put differently, to what extent do judges decide cases according to their personal values? To what extent are they influenced by other judges? By legal norms? By concerns for the institutional place of their Court? By the values and attitudes of their particular region? By the way in which they were selected? American Government. Prerequisite: Political Science 100. One unit.

Addresses the role of race in American political processes and institutions. Drawing heavily on the perspectives of African-Americans, the course surveys the history of race in American politics from the era of emancipation to the present. Topics include black political culture, political behavior, and rhetoric; race and the media; black women in politics; and varieties of black nationalism and conservatism. American Government. Prerequisite: Political Science 100. One unit.
Political Science 206 - Public Policy
Annually
Course begins by examining the role policy was intended to perform in a commercial republic. Lectures and readings will call attention to both the normative and empirical dimensions of policymaking. The intention is to understand policy in the broadest possible context-not as a distinct moment in time, but rather as the result of a dynamic process that itself has dynamic consequences. A constant theme will be the debate over whether markets or policymakers are best suited to allocate resources and provide basic services. As we develop the skills needed to evaluate policy we will rely on several case studies drawn from social welfare, regulatory, and civil rights policy. American Government. Prerequisite: Political Science 100. One unit.

Political Science 207 - American Presidency Fall
Studies the presidency as an office that shapes its occupants just as profoundly as specific presidents have shaped the character of the office. The course traces the historical evolution of the presidency from the founding to the present. Among the topics considered are: presidential selection, the president as party leader, war powers and the president as commander in chief, the president as the nation's chief administrator, and the president as legislative leader. American Government. Prerequisite: Political Science 100. One unit.
Political Science 208 - Congress and the Legislative Process
Spring
Studies the United States Congress as a constitutional institution, beginning with the American founding and the intent of the framers in designing a bicameral legislature with enumerated powers. The course reviews Congress' evolution over time in response to changing political conditions, and examines key aspects of Congress today including electoral dynamics, partisanship, the committee system, leadership, budgeting, and the meaning of representation and deliberation. American Government. Prerequisite: Political Science 100. One unit.

## Political Science 209 - Urban Politics

Annually
Seeks to understand public decision making at the local level. We begin with an examination of the normative ideas regarding the purpose of city life-ideas that set the ethical standards by which we evaluate decisions. We then turn to a critical study of the role of formal and informal institutions in creating a decision making arena. Students will also explore several theories posited by urban political scientists in an effort to explain the urban condition and apply those theories to a number of case studies drawn from urban America. American Government. Prerequisite: Political Science 100. One unit.
Political Science 210 - Urban Policy
Annually
Examines the design and effectiveness of public policy and service delivery at the local level. Specific topics will include crime, education, housing and economic development, and environmental justice. This course will take a broad definition of its subject matter, understanding policy to involve not only direct governmental programs, but also non-traditional approaches to service delivery including the use of non-profit and faith based organizations and also private enterprise. American Government. Prerequisite: Political Science 100. One unit.

Political Science 211 - Political Parties and Interest Groups
Spring
Examines the major organizations and processes of American electoral behavior. Considerable attention will be paid to political parties and an examination of the role of parties in American political thought and development as well as the contemporary role of parties and interest groups in American politics. Topics will include party identification; the relationship between elections and government; the impact of parties and interest groups on public policy; and American parties and interest groups in comparative perspective. American Government. Prerequisite: Political Science 100. One unit.

Reviews the historical development of the modern bureaucratic state and examines the dilemmas of governance associated with it. Particular attention is devoted to the modern attempt to separate politics from administration, and to the accommodation of bureaucracy to the American context of federalism and separation of powers. The course draws on a variety of case studies at the national, state, and local levels. American Government. Prerequisite: Political Science 100. One unit.
Political Science 218 - Revolutionary China Alternate years
Explores the history of modern China from the Opium Wars of the 1840 's to the present. Two central themes of the course are the tension between reform and revolution as alternative paths for the modernization of China and the ways in which the outcome of the Communist Revolution has been shaped respectively by the forces of history and ideology. The course will focus on the following questions: (1) the rise of the Communist Party and the reasons for its victory over the Nationalists; (2) Mao's ideological campaigns of the 1950's and 1960's, culminating in the Cultural Revolution; (3) the dynamics and dilemmas of post-Mao economic and political reform; (4) the 1989 Democracy Movement and its aftermath; (5) debates over U.S. policy toward China. Special emphasis will be placed on analysis of primary documents and on first-hand accounts by participants in the events under consideration. Comparative Policy. One unit.

## Political Science 225 - Liberalism and Its Critics

Spring
Explores the political, historical, philosophic and economic foundations of liberalism. First, the class will focus on distinguishing the various principles which define classical liberalism, including political equality, private property, rule of law, constitutionalism, state/society distinction, secularism, privacy, etc. We will read not only the major sources of these principles, but also historical sources of their criticisms. We will then turn to the contemporary debates about and within liberalism, focusing on such issues as the role of the state, communitarianism, discursive models of legitimacy, and multiculturalism. Political Philosophy. Prerequisite: Political Science 101. One unit.
Political Science 226 - Gender and Political Theory
Annually
Examines how gender issues have been treated in the history of political philosophy. Students explore questions about the status of the family, the equality of the sexes, and the relationship between public and private spheres of human life. The course also considers how gender issues intersect with other political considerations. Political Philosophy. Prerequisite: Political Science 101. One unit.

## Political Science 227 - Classical Political Philosophy

Alternate years in fall
Close study of several works by major classical political thinkers such as Plato, Aristotle, Thucydides, Aristophanes, and/or Cicero. Focus on such central themes as the nature of justice, the relation between politics and science, the variety of political regimes, and the possibilities and limits of political reform. Political Philosophy. Prerequisite: Political Science 101 or Classics major. One unit.
Political Science 228 - Modern Political Philosophy
Alternate years in spring
Close study of works by several major modern political philosophers such as Bacon, Montesquieu, Rousseau, Burke, Hume, and Nietzsche. Central themes include the rise and political consequences of the modern project of "mastering" nature; the political effects of commerce; the replacement of virtue by freedom and/or security as the goal of politics; the relation of political philosophy to history; and the Nietzschean critique of modern egalitarianism. Political Philosophy. Prerequisite: Political Science 101 or permission of the instructor. One unit.

## Political Science 229 - Contemporary Political Theory

Alternate years
Analysis of major recent works on political philosophy by such Anglo-American writers as John Rawls, Robert Nozick, Alasdair Macintyre, Richard Rorty, Irving Kristol, and Harvey Mansfield. Topics include the relation among liberty, equality, and justice; the grounds of moral judgment; and the meaning of justice in the American constitutional regime. Political Philosophy. Prerequisite: Political Science 101 or permission of the instructor. One unit.

Examination of fundamental problems of political life through the study of literary works such as Aristophanes, Sophocles, Shakespeare, Swift, Melville, and Faulkner. Themes include the effects of various forms of government on human character; the central ethical conflicts of political life; and the problem of race in the American polity. Political Philosophy. Prerequisite: Political Science 101. One unit.

## Political Science 232 - Science, History, and Political Philosophy

Alternate years
Examines the philosophic foundations of several highly influential trends of contemporary thought: idealism, historicism, and social-science positivism. Readings include Kant's Foundations of the Metaphysic of Morals and writings on history; Hegel's The Philosophy of History (excerpts); Nietzsche, Beyond Good and Evil; and writings by Max Weber and Leo Strauss. Political Philosophy. Prerequisite: Political Science 101. One unit.

## Political Science 233 - American Political Thought, 1: to 1850

Alternate years Focuses on some of the most important texts setting forth the principles underlying the founding of the American regime, as well as the subsequent development of those principles up to the pre-Civil War period. Two non-American writers (Locke and Tocqueville) are included because of the influence of their works on American political thought. Other writers and works studied include the Puritans, Jefferson, The Federalist, and the Antifederalists. Political Philosophy. Prerequisite: Political Science 100 or 101. One unit.

Political Science 234 - American Political Thought, 2: 1850-Present Alternate years Traces the development of American political thought from the slavery controversy and the Civil War up to the present. Major themes include: Lincoln's refounding of the American regime; the transformation of American liberalism by Woodrow Wilson and Franklin Roosevelt; and New Left and neoconservative thought. Political Philosophy. Prerequisite: Political Science 100 or 101. One unit.
Political Science 245 - American Political Development
Annually
Examines the recurring problems associated with political change, the evolution of national institutions, and the emergence of increased state capacities in the unique context of America's restlessness with authority and attachment to democratic ideals. We'll consider how a nation committed to what Samuel Huntington identifies as a creed of "opposition to power and concentrated authority," created solutions to the unique problems of governance in the "modern" age. The course is both historical survey and historical analysis, and will cover the emergent national state in the immediate post-Founding era, the Jacksonian hostility to centralization, the effect of the Civil War on national capacities, the reform of the civil service in the nineteenth century, and the construction of the American welfare state under Roosevelt's New Deal. This is not a history course, but a political science course that takes history seriously, using it as a departure for resolving persistent problems in American politics. American Government. Prequisite: Political Science 100. One unit.
Political Science 251 - Latin American Politics
Spring
A comparative study of political institutions and processes in selected Latin American countries, and an analysis of theories that attempt to explain Latin American development and underdevelopment. Examination of Latin America's experience with authoritarianism, democracy, revolution, and civil war, and of contemporary political challenges including drug trafficking, environmental degradation, human rights abuses, regional integration, and economic globalization. Comparative Politics. Prerequisite: Political Science 102. One unit.

Political Science 255, 256 - Soviet Politics 1, 1917-1953; Soviet and Russian Politics 2, 1953-Present

A two-semester sequence dealing with Soviet/Russian politics and policies from the 1917 Revolution to the present. The first semester begins by examining the ideological bases of the Bolshevik Revolution, then proceeds to an examination of Soviet government under Lenin and Stalin, with emphasis on the political and ethical dilemmas associated with rapid modernization of a backward country. The second semester addresses the evolution of Soviet/Russian politics and society from Stalin's death in 1953 until the present. Major topics in the second semester include the Khrushchev reforms of the 1950s and 1960s, Gorbachev's campaign for perestroika and the revolutionary processes of economic, political, and social change it unleashed in the 1980s, and the prospects for a successful transition to democracy and a market economy in post-Communist Russia. Comparative Politics. Prerequisite for Political Science 255 is Political Science 102. Political Science 255 is a pre-requisite for Political Science 256. One unit each semester.

## Political Science 257 - Politics of Development

Alternate years
How can the world's less developed countries achieve sustainable development (in environmental, economic, and political terms)? This course discusses structural and institutional challenges to sustainable development in the global South, investigates different responses to these challenges (and their different degrees of success), and assess the impact of development-and underdevelopment-on both societies and the environment.Comparative Politics. Prerequisite: Political Science 102. One unit.
Political Science 258 - Democratization Fall
Assesses competing theories of the historical conditions and processes most likely to lead to the establishment of democratic regimes by comparing instances of successful and unsuccessful democratization in Latin America, Africa, and Eastern Europe. Key issues to be explored include the role of elite pacts and the effect of truth commissions on democratization, the question of whether political democracy and economic redistribution can be pursued simultaneously, the relative advantages of presidential vs. parliamentary forms of government, and the implications of alternative types of electoral systems. Comparative Politics. Prerequisite: Political Science 102. One unit.

Political Science 261 - Contemporary African Politics
Spring
An examination of the process of establishing political order and providing for change in contemporary Africa. Topics include: problems of decolonization, national integration and mobilization, parties, ideologies, elites, and political symbols. Comparative Politics. One unit.

## Political Science 263 - Black Political and Social Thought

Annually
Addresses the role of race and ethnicity in American political processes and institutions. Beginning with an assessment of the categorizations of race and ethnicity, the course considers the ways in which race and ethnicity become politicized and institutionalized, differing strategies for addressing racial injustice, and the comparative advantages and disadvantages that result from different groups' places within American society. Policy issues addressed may include but are not limited to immigration and citizenship, affirmative action, political participation, and economic equality. Political Philosophy. Prerequisite Political Science 100. One unit.

Political Science 265 - West European Politics
Alternate years
Explores the relationship between states and citizens in Western Europe, with particular focus on Britain, France, Germany, and Italy. Major topics include the nature and sources of nationalism, the ongoing transformation of national identity, revolutionary and reactionary traditions in European politics, the politics of immigration, the political effects of economic modernization, and the politics of European integration. Comparative Politics. Prerequisite: Political Science 102. One unit.
Political Science 269 - Power and Politics: A View from Below
Alternate years
What is the meaning and impact of politics seen from the perspective of those at the bottom of the pyramid of political power rather than from the usual focus on the actions and perceptions of political
elites? In what ways do "the masses" become involved in politics? Under what circumstances are they likely to be successful in bringing about change? This course addresses these questions by exploring political power, political participation and political change from a broad historical and Cross-Cultural perspective-but always focusing on a view of politics from the bottom up. Cases studied include peasant protests and city mobs in preindustrial Europe, the creation of the industrial working class and the rise of labor politics in Britain and the United States, peasant revolution in the 20th century (with particular emphasis on the Chinese case), and the dynamics of contemporary Third World nationalist movements, as well as their counterpart in the American Black Power movement. Comparative Politics. One unit.

## Political Science 270 - Africa and the World

Examines the historical and contemporary relationship between Africa and the rest of the world. Though Africa has been influenced by and acted upon by other peoples, it and its peoples have also had a significant influence on the course of history and development in the world. The course will deal with Africa's relationships with the European world, Africa and the United States, Africa and the Socialist world, Africa and the Middle East and Africa's search for Pan-African unity. International Relations. One unit.

## Political Science 272 - Politics of the Middle East

Fall
An examination of politics in selected Middle Eastern countries. The course begins with a brief overview of the rise and spread of Islam in the region and the establishment of Muslim empires, then turns to an exploration of the role of European colonialism in post-independence Middle Eastern politics. We will analyze various explanations for the difficulty of establishing durable democracies in the region, explore the political implications of religious identity and secular nationalism, and assess prospects for peaceful resolution of the Israeli-Palestinian conflict. Comparative Politics. Prerequisite: Political Science 102. One unit.
Political Science 273 - Religion and Politics of the Middle East
Spring
This course is a continuation of Political Science 272. Examines the relationship between religion and politics in Israel, Turkey, Iran, and Egypt in order to answer several key questions. Are there particular sociopolitical or economic circumstances which particularly facilitate the rise of conservative religious groups? Do certain types of political institutions tend to augment the power of such groups? To what extent, if at all, is the incorporation of religion into state law compatible with democracy, and have more secular Middle Eastern governments been better protectors of democracy and liberty than avowedly religious ones? Why do women-their behavior, their dress, their roles in society and the family-play such a central role in the discourse of both conservative Jewish and conservative Muslim groups? Comparative Politics. Prerequisite: Political Science 272. One unit.
Political Science 274 - Nationalism
Spring
Examines several leading theories of nationalism and cases of nationalist sentiment and movements in Western Europe, South Asia, and the Middle East. The course is structured around one central question: do national identities emerge "naturally," or are they "constructed" through specific policies and institutional practices? To answer this question, we will compare Western European and anti-colonial nationalisms, examining the methods used by states to facilitate the emergence of national identities and the roles that religious identity and social class play in the development of political allegiances. Comparative Politics. Prerequisite: Political Science 102. One unit.

## Political Science 275 - International Political Economy

This course is designed to be an introduction to international political economy. Provides an overview of theories of international political economy, a historical review of the international political economy in light of these theories, and an application of the theoretical approaches to issues of trade, monetary
relations, finance, and development. Readings and discussion will focus on issues of conflict and cooperation; the relationship between the international system and domestic politics; economic growth, development, and equity; and the connections between the study of economics and politics. International Relations. Prerequisite: Political Science 102 or 103 . One unit.
Political Science 276 - The United States and the Persian Gulf
Alternate years in fall Examines relations between the United States and the countries of the Persian Gulf: Iraq, Iran, Saudi Arabia, Yemen, the United Arab Emirates, and Kuwait. Following a brief introductory section dealing with the historical, cultural and geographic background, the course focuses on U.S. relations with these countries since 1945, from the development of the U.S. role in the oil industry to Desert Storm and its aftermath. International Relations. Prerequisite: Political Science 102 or 103. One unit.

## Political Science 277 - Americans, Israelis, and Arabs: The United States and the Eastern Mediterranean <br> Alternate years in fall

Examines the relationship among the United States, Israel, and the Arab countries of the eastern Mediterranean: Egypt, Jordan, Lebanon, Syria, and Libya. After a brief introductory section, the course focuses on U.S. relations with the countries of this region since 1945 and how U.S. foreign policy has affected, and been affected by, political developments in the region including the Arab-Israeli conflict. International Relations. Prerequisite: Political Science 102 or 103. One unit.

## Political Science 280 - International Relations Theory

Spring
An introduction to major theoretical debates in international relations. Surveys the field's leading paradigms including realism, liberalism, institutionalism, constructivism, and feminism. It examines problems of theory construction, causality, explanation, and empirical confirmation and disconfirmation as they relate to international political phenomena. International Relations. Prerequisite: Political Science 103. One unit.

Political Science 282 - American Foreign Policy
Fall
Explores major themes in U.S. foreign policy, focusing on the longstanding and ongoing debate between international engagement and isolationism. Topics discussed include the historical evolution of U.S. foreign policy, the roles played by specific institutional and societal actors in the formulation of policy, the problem of crisis management, and contemporary issues facing the United States including international trade and finance, proliferation and regional security, the resort to force, human rights, and humanitarian intervention. International Relations. Prerequisite: Political Science 103. One unit.

## Political Science 283 - International Law and Organization

Spring
Despite the emphasis customarily placed on conflict and discord in the international system, it is clear that states in fact regularly seek to facilitate cooperation and mutual restraint. What motivates these efforts? How successful are they in overcoming the effects of international anarchy? This course addresses these questions by examining the institutions through which states attempt to organize their relations with each other. Topics include the history, functions, and relevance of international law, the role of international organizations (including but not limited to the United Nations), and contending approaches to the problems of world order and conflict management. International Relations. Prerequisite: Political Science 103. One unit.

## Political Science 284 - Human Rights

Fall
Since World War II, questions of human rights have come to occupy a central place in international politics. This course examines the historical evolution and political effects of international human rights norms. Topics addressed include the philosophical and legal basis of human rights, the origins of modern human rights covenants in the aftermath of Nazi atrocities, the effects of the Cold War on human
rights politics, the tensions between national sovereignty and international human rights standards, the debate between universalist and particularist conceptions of human rights, patterns of compliance with human rights agreements, and the development of human rights enforcement mechanisms. International Relations. Prerequisite: Political Science 103. One unit.

Political Science 286 - Comparative Environmental Policy
Fall
The U.S. and countries throughout the world have experimented widely in their quest to address common environmental problems. This course undertakes a comparative study of the development of domestic and international environmental policies in three advanced industrial states (the U.S., U.K., and Germany), as well as providing an overview of developing country environmental policies. The focus of the course is on three questions. How do national differences in institutions, political culture, regulatory style, and economic structure shape domestic and international environmental policies? What impact do these differences have on the ability of states to achieve cooperative solutions to common environmental problems? What influence do international environmental interactions have on domestic environmental policy? Comparative Politics. Prerequisite: Political Science 102 or permission of the Instructor. One unit.

## Political Science 290 - National Security Policy

Spring
Focuses on contemporary national security problems faced by the United States as it seeks to manage the post-Cold War international order. Topics include relations with other major powers and with the Islamic world, U.S. military interventions abroad, terrorism the proliferation of weapons of mass destruction, and nuclear strategy. Particular attention is given to the domestic dimensions of U.S. security policy, including the politics of weapons procurement and the longstanding ideological debate regarding American national interest. International Relations. Prerequisite: Political Science 103. One unit.
Political Science 299-01 - The Politics of European Integration Fall
Examines how European states, beginning in the immediate aftermath of the Second World War, have come to create the most extensive supranational entity to date. Considers different theories of European Integration, the institutions of the European Union, and the evolving relationship between the EU and its member states. Contemporary topics include European Monetary Union, EU enlargement, and the making of a European Constitution. International Relations/Comparative Politics. Prerequisite: Political Science 102 or Political Science 103 or permission of the instructor. One unit.

Political Science 299-02 - Shakespeare's Political Wisdom I
Fall
A study of four plays-King Lear, The Tempest, Henry IV, parts 1 and 2, and Richard III-for what they tell us about society, ruling, religion, human nature and the good life. Political Philosophy. One unit.

## Political Science 299 - Fascism and the Far Right in Comparative and Historical Perspective

Spring
Examines far right politics and political parties in democratic states. Compares and contrasts fascist movements in interwar Europe, seeking to understand the rise of Nazism in Germany, the implosion of democracy in Italy, and the failure of the far right in interwar France. Explores the rise of right-wing populist parties across Western Europe over the last several decades. Examines the rise of far right parties in India and other non-Western democracies. The overarching goal is to understand the conditions that give rise to far right parties in democracies and the influence they exert on the wider political environment. Comparative Politics. Prerequisite: Political Science 103 or permission of the instructor. One unit.

Political Science 300 - Seminar: Law, Politics and Society
Spring
Examines the relationship of the American legal system to certain critical social and political processes. After a survey of existing law on civil liberties and rights, the role of groups in bringing test cases and the dynamics of civil liberties litigation will be discussed, using case studies involving political surveillance, racial equality, church-state issues, consumer rights, women's rights and other issues. Implementation of court decisions will also be assessed. American Government. Prerequisite: Political Science 100 or

## 201. One unit.

Political Science 310 - Seminar: Women and American Politics
Fall
Examines the role women have played in the American political system. Begins with an examination of women's attempts to take their private concerns into the public realm. Turns to the relationship between the feminist movement and women's political organization. Other topics include women in the electoral and public policy arenas, and elite and grassroots women's politics. The course also examines two new areas in the study of women's politics: the relationship between women and the media, and the role of minority women in American politics. Concludes with an examination of the politics of contemporary young women. American Government. Prerequisite: Political Science 100. One unit.
Political Science 314 - Political Philosophy and Education
Spring
Many classical liberals as well as contemporary democratic theorists emphasize the importance of a well-educated populace in order to secure the conditions for liberty and the capacity for self-governance. One must therefore consider how one might transform children, who are dependent upon and subject to the authority of adults, into independent, rational adults capable of living among equals, without establishing in them habits either of subservience or dominance. If indeed well-educated citizens are required in order to achieve democracy rather than "mob rule," then what exactly is the role of the state in shaping the characters and preferences of its citizens? In considering what a "well-educated populace" might mean, we must address the tension that exists between the goal of a radically independent intellect and the goal of good citizenship. In a liberal republic, it should be possible in principle for these two goals to converge. Are there limitations to putting this principle into practice? Readings from Locke, Rousseau, Dewey, Freire, Oakeshott and others. Political Philosophy. Prerequisite: Political Science 101 or permission. One unit.
Political Science 315 - Contemporary Feminist Political Theory
Alternate years
Examines some of the core concepts, questions and tensions that cut across various strands of contemporary feminism. Topics include: What is feminist political theory trying to explain, and how might we go about it? Why is it that feminist inquiries into political matters so often lead to questions about the foundations of knowledge? What are the political implications of feminist struggles to combine unity and difference? How have questions of race and class transformed feminist theory? This course also applies various feminist perspectives to specific policy debates. Political Philosophy. Prerequisite: Political Science 101 or permission. One unit.
Political Science 320 - Seminar on Political Violence
Annually
Explores the historical and ideological roots of 20th-century political violence, as well as undertaking in-depth case studies of several of its contemporary manifestations. Cases studied include: the French Revolution, Russian anarchism in the 19th century, Third World national liberation movements (Algeria and South Africa), the Zapatista revolt in Mexico, left-wing ideological terrorism in Italy, right-wing militias in the United States, Islamic fundamentalist terrorism, and ethnic/religious conflict in Rwanda and the former Yugoslavia. Topics include the psychological/sociological profile of revolutionaries or terrorists, the causes of and justifications for political violence, the internal dynamics of revolutionary or terrorist movements, explanations for their success or failure, and the ways in which states have attempted to deal with the aftermath of mass political violence. Comparative Politics. Permission of the instructor. One unit.

## Political Science 324 - East Asian Development

Annually
Examines the dramatic economic growth of the economies of East and Southeast Asia and explores the social, political, and economic foundations of East Asian economic development. Provides a brief historical overview of the region prior to World War II and then analyzes the post-World War II 'model' of Japanese development. The remainder of the course examines the attempts by other states in the region (with particular emphasis on South Korea, Indonesia, and Malaysia) to adapt the Japanese model to the specific circumstances of each country. The course pays particular attention to the variation in national
approaches to democratization, ethnic relations, industrial organization, macroeconomic policy, and integration into regional and world organizations. Comparative Politics. Prerequisite: Political Science 102 or History 287. One unit.
Political Science 326 - Citizenship in Contemporary Latin America Annually
An interdisciplinary course that fulfills major and concentration requirements for Political Science, Latin American Studies and Peace and Conflict Studies. Aims to maximize students' understanding and actual experience of citizenship struggles in Latin America. Discusses key concepts and approaches to the study of social movements in the region, as well as empirical citizenship struggles implemented by different populations (indigenous peoples, forest people, landless groups, labor, and women, in different Latin American countries). Active participation by students, through class discussions and presentations, is a major requirement of the course. Prerequisite: Political Science 102 (with consent from instructor) if they have taken previous courses in Latin American History, Politics, or Society. One unit.

## Political Science 332 - Seminar: Imperialism

Spring
Surveys the phenomenon of imperialism and explores its impact on present-day world politics. Examines the historical roots of European colonial expansion, with special attention to the political, economic, and technological dynamics of 19th-century imperial conquest. Other topics include the nature of colonial governance, the psychological dimensions of colonial control, the causes of decolonization after World War II, and the long-term effects of imperialism on postcolonial societies. International Relations. Prerequisite: Political Science 103. One unit.

## Political Science 333 - Ethics and International Relations

Fall
Can considerations of justice and equity be incorporated successfully into national foreign policies, given the will to do so? Or must a successful foreign policy always be amoral? This course examines problems of ethical choice as they relate to international politics. Topics include the relationship between ethical norms and international law, the laws of war, the tension between human rights and state sovereignty, the ethical implications of global inequity, and the difficulties involved in applying standards of moral judgment to the international sphere. International Relations. Prerequisite: Political Science 103 or CISS 130-Introduction to Peace and Conflict. One unit.
Political Science 451 - Tutorial Seminar
Fall, spring
Individual research on selected topics or projects. Permission of the instructor and the department chair is required. One unit each semester.
Political Science 490, 491 - Political Science Honors Thesis
Annually
By permission. One unit each semester.

## Psychology

John F. Axelson, Ph.D., Professor
Danuta Bukatko, Ph.D., Professor
Mark Freeman, Ph.D., W. Arthur Garrity, Sr. Professor in Human Nature, Ethics and Society, Professor and Assistant Dean
Charles M. Locurto, Ph.D., Professor
Daniel B. Bitran, Ph.D., Associate Professor and Chair
Andrew M. Futterman, Ph.D., Associate Professor
Mark C. Hallahan, Ph.D., Associate Professor
Suzanne R. Kirschner, Ed.D., Associate Professor
Patricia E. Kramer, Ph.D., Charles A. Dana Faculty Fellow and Associate Professor
Richard C. Schmidt, Ph.D., Associate Professor
Charles S. Weiss, Ph.D., Associate Professor
Amy R. Wolfson, Ph.D., Associate Professor
Alison L. Bryant, Ph.D., Assistant Professor
Annette R. Jenner, Ph.D., Assistant Professor
Emily Abbey, Cand. Ph.D., Visiting Instructor
Clinton H. Cooper, Cand. Ph.D., Lecturer
Elizabeth J. Cracco, Ph.D., Lecturer
Matthew R. Elliott, Ph.D., Lecturer
Denise A. Hines, Ph.D., Lecturer
Psychology is the scientific study of behavior and mental life. The discipline is broad, with different fields of study that range from conducting basic research in laboratory or field settings, to meeting the needs of individuals or groups in clinical settings, to addressing philosophical questions of the discipline. The Department represents these various orientations, encouraging students to engage in the analysis of psychological phenomena from diverse perspectives.

Majors in the graduating Class of 2006 take a minimum of 11 courses in the Psychology Department. Majors in the graduating Classes of 2007 and beyond take a minimum of 10 courses in the Psychology Department. The first course taken by majors is Introductory Psychology (Psychology 100). Subsequently, students begin an in-depth examination of the process of psychological inquiry by taking a course in statistics (Statistics-Psychology 200) and a course in methodology (Research Methods in Psychol-ogy-Psychology 201). In the third or fourth year, students explore the historical and philosophical roots of psychology by taking History and Theory of Psychology (Psychology 205).

Majors in the Class of 2006 take four courses that explore the natural and social science perspectives of the discipline, with two chosen from the natural science perspective (Category A Requirement: Cognition and Memory, Evolution and Behavior, Learning, Physiological Psychology, Psychology of Language, or Sensation and Perception) and two from the social science perspective (Category B Requirement: Abnormal Psychology, Psychology of Adolescence, Psychology of Aging, Developmental Psychology, Personality, or Social Psychology). Majors also take at least one advanced-level course in psychology (i.e., any 300 level course, including seminars). The remaining two required courses are chosen in accordance with a student's own developing interests and curricular needs and may be any of the courses noted above or other electives.

Majors in the Classes of 2007 and beyond explore fundamental areas of the discipline by completing one course from each of the following: Biological Psychology (Physiological Psychology, Evolution of Behavior, or Learning), Cognitive Psychology (Sensation and Perception, Cognition and Memory, or Psychology of Language), Developmental Processes (Developmental Psychology, Psychology of Adolescence, Psychology of Aging, or Culture and Development), and Individual and Social Processes (Abnormal Psychology, Personality, or Social Psychology). Majors must also take a seminar course where rhetorical skills (i.e., writing and speaking) are emphasized in a small group setting. The remaining required course is chosen from a list of intermediate or upper level electives that serve a number of complementary
functions in the major. Included are courses that advance a student's understanding of a fundamental area (e.g., Biological Basis of Mental Disorders), courses that integrate across fundamental areas within psychology (e.g., Cognitive Development) or with other disciplines (e.g., Neuroanatomy and Behavior), or courses that study applications of psychology to real world problems (e.g., Clinical Psychology, Drugs of Abuse, or Health Psychology).

Additionally, all majors must fulfill the common requirement in the social sciences by taking at least one social science course outside the Psychology Department. Similarly, majors must fulfill the common requirement in the natural and mathematical sciences by taking at least one natural science or mathematics course outside the Psychology Department. Majors are assisted in selecting other courses outside the Department that help provide a coherent, well-integrated program of studies.

There is ample opportunity for students to pursue advanced study (Directed Readings-Psychology 470) and research (Research Projects-Psychology 480) under the individual direction of their professors. These courses may be used to fulfill the elective requirement of the major. Our faculty are actively engaged in research on a variety of topics, including the effects of hormones and drugs on behavior, individual differences in animal intelligence, cognitive development in children, the relation of perception and action, sleep, the neuropsychological basis of language and reading, social and cultural psychology, health psychology, and grief and bereavement. Many of the department's majors have presented papers at regional and national undergraduate and professional meetings and have published their work in professional journals. The undergraduate liberal arts degree in psychology also provides students with many advanced-study and career options and has led to students being placed in graduate programs in psychology and medicine as well as a wide variety of workplaces.

## Biological Psychology Concentration

The Psychology Department, in cooperation with the Biology Department, offers an interdisciplinary concentration that concerns the study of neuroscience and behavior. The concentration requires an understanding of various fields including biology, psychology, chemistry, physics, mathematics and computer science. Concentrators majoring in either biology or psychology are exposed to original research throughout the concentration and may elect to spend their fourth year engaged in a thesis project. Admission to the concentration is by application. Interested students should consult with the Concentration Director, Prof. John Axelson, prior to enrolling in second-year courses.
Advanced Placement Credit: Students with AP credit in psychology (a score of 4 or 5) are awarded advanced placement in the curriculum and forfeit that credit if they take Psychology 100, Introductory Psychology. AP credit counts toward the minimum number of courses required in the major.

## Courses

## Psychology 100 - Introductory Psychology

Fall, spring
An introduction to the principles of psychology as emerging from the areas of physiological, sensation and perception, developmental, learning, cognition and memory, social, personality, and abnormal. This course is required of psychology majors. One unit.

## Psychology 140 - Human Nature, Ethics, and Society

Fall, spring
Explores a number of fundamental philosophical and psychological questions concerning the human condition: What is human nature? What are the desired ends of human life? Given our nature-which will be no easy task to determine-what kinds of personal commitments and social arrangements will best promote these ends? At a most basic level, this course seeks to foster reflection and discernment regarding who and what we are and ought to be. At the same time, the course is outward looking and seeks to help students find an appropriate balance between realism about the human condition and hope about our prospects for fashioning a better, more just world. Fulfills an Elective Course Requirement. Prerequisite: Enrollment is limited to first year students. One unit.

An introduction to descriptive and inferential statistical methods in analysis and interpretation of psychological data. Required of psychology majors. Prerequisite: Psychology 100. One and one-quarter units.

Psychology 201 — Research Methods in Psychology
Spring
A thorough survey of methods and techniques employed in psychological research is covered. Topics include observational research, surveys, case studies, experimental designs, and ethical issues in research. Emphasis is on critical evaluation of research. Students develop the skills to design an experiment, statistically analyze and interpret the results, and to present the findings in a written and oral report. Required of psychology majors. Prerequisite: Psychology 200. One and one-half units.

## Psychology 205 — History and Theory of Psychology <br> Fall, spring

An examination in historical perspective of what are considered to be the major systems (e.g., psychoanalysis, behaviorism, existential psychology) of psychology. The course begins by using a number of philosophical questions regarding the status of psychology as a scientific discipline, moves on to a comprehensive treatment of the systems themselves, and finally, returns to initial questions to determine the extent to which they have been answered. Required of psychology majors. Prerequisite: Psychology 100. One unit.

Psychology 220 - Sensation and Perception
Annually
The two major contemporary theories of perception are discussed for each of the sensory/perceptual systems (vision, audition, haptics, gustation, olfaction). For both theoretical approaches, a critical examination is made of the relation of sensory processes, perceptual abilities, and action systems with the goal of explaining how we are able to perceive the world. Fulfills a Category A Requirement (Class of 2006) or a Cognitive Psychology Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.

## Psychology 221 - Physiological Psychology

Fall, spring
The structure and function of the nervous system is studied to provide an appreciation of the biological basis of behavior. The first half of the course emphasizes neuroanatomy, basic cell physiology, effects of drugs on behavior, and the autonomic nervous system. Later topics include physiological influences on sleep-wake and circadian rhythms, reproductive behavior, eating and drinking, learning and memory, emotions, and mental illness. Fulfills a Category A Requirement (Class of 2006) or a Biological Psychology Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.

## Psychology 223 - Learning

Annually
An intensive evaluation of how behavior is acquired and maintained. Focuses on Pavlovian and operant conditioning in animals and human subjects. Special topics include the application of these principles to psychotherapy, drug addiction, self-control, and biological influences and constraints on learning. Fulfills a Category A Requirement (Class of 2006) or a Biological Psychology Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.

Psychology 225 - Developmental Psychology
Annually
A survey of theory and research pertaining to both cognitive and social development. Special topics include prenatal development, early experience, perception, memory, intelligence, socialization, moral development, sex-role development, and patterns of child-rearing. Fulfills a Category B Requirement (Class of 2006) or Developmental Processes Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.
Psychology 226 - Personality
Annually

Covers several major conceptions of personality such as the psychoanalytic, humanistic, cognitive, trait, and behavioral approaches. The theories of such psychologists as Freud, Maslow, Kelly, Allport, and Skinner are presented to attain a broad understanding of human personality. Fulfills a Category B Requirement (Class of 2006) or an Individual and Social Processes Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.

## Psychology 227 - Social Psychology

Annually
An overview of the methods and research findings of social psychology. Emphasis is on the experimental analysis of topics such as person perception, interpersonal attraction, prosocial behavior, aggression, social exchange, and group behavior. Fulfills a Category B Requirement (Class of 2006) or an Individual and Social Processes Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.

## Psychology 229 - Abnormal Psychology

Annually
Examines mental illness throughout the life span, with discussions of the developmental, biological, behavioral, psychosocial, cultural, and other theories that attempt to explain emotional and behavioral problems. One goal for the course is to develop an understanding of how information about mental illness and mental health is obtained, and the problems associated with the evaluation and interpretation of this information. Fulfills a Category B Requirement (Class of 2006) or an Individual and Social Processes Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.

## Psychology 236 - Cognition and Memory

Annually
Examines current perspectives on how a physical system can have intelligence and know its world. The cognitive science (computer metaphor), connectionist and ecological perspectives will be surveyed. Of interest is how we can model 'cognitive machinery' and how this machinery produces such phenomena as attention, pattern recognition, and information storage. Fulfills a Category A Requirement (Class of 2006) or a Cognitive Psychology Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.

## Psychology 237 - Psychology of Language

Alternate years
An overview of the psychology and neuropsychological bases of language. Language is defined through the evaluation of human and animal communication. Topics such as Chomsky's linguistic principles, speech perception, speech production, language acquisition, reading and bilingualism are included. These basic concepts of language are then applied to an understanding of different forms that language can take: spoken, written, and sign, and language disorders (e.g. aphasia, dyslexia). Fulfills a Category A Requirement (Class of 2006) or a Cognitive Psychology Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.

## Psychology 239 - Psychology and Aging

Alternate years
An overview of behavioral changes in adulthood and unique psychological aspects of later-life. The first half of the course describes research methods in lifespan developmental and aging, examines biological processes that are associated with aging, and explores cognitive, emotional, personality and social changes that characterize successful aging. The second half examines abnormal aging; in particular, the assessment and treatment of common problems in later life, e.g., depression, Alzheimer's Disease, bereavement. This course is required for students enrolled in the Gerontology Studies Program. Fulfills a Category B Course Requirement (Class of 2006) or a Developmental Processes Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.

## Psychology 242 - Clinical Psychology

Alternate years
A general introduction to the origin, development, and techniques of clinical psychology is covered in this course. Included is a survey of treatment issues, interviewing, importance of assessment and diagnosis. Importance of specific areas, e.g., behavior therapy, to the modern-day approach to clinical psychology is stressed. Fulfills an Elective Course Requirement. Prerequisite: Psychology 229. One unit.
Psychology 244 - Health Psychology
An introduction to the major concepts in health psychology and the role of psychologists in health
research and health care. Explores psychosocial influences on illness and health; the psychological sequence of illnesses such as cancer, AIDS, and heart disease; illness prevention and health promotion; pain and pain management; and psychological issues in chronic and terminal illness. Fulfills an Elective Course Requirement. Prerequisite: Psychology 100. One unit.

## Psychology 253 - Evolution of Behavior

Annually
Explores the origins and nature of human nature. Focuses on the evolutionary origins of human nature as revealed through the available fossil record and through analysis of other primate species, particularly chimpanzees. Topics include sex differences, language development, the origins of psychiatric disorders, and the evolutionary basis for human social behavior and human intelligence. Fulfills a Category A Requirement (Class of 2006) or a Biological Psychology Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.
Psychology 254 - Psychology and Law
Alternate years
Examines aspects of psychology that have relevance for the legal system, focusing primarily on applications from social and cognitive psychology. Topics include jury behavior, persuasion and influence in the courtroom, eyewitness reliability, the detection of deception, and capital punishment. The course also considers psychology's influence on the legal system both in terms of research that has been used in landmark courtroom decisions and psychologists serving in the roles of consultant and expert witness. Fulfills an Elective Course Requirement. Prerequisite: Psychology 100. One unit.
Psychology 261 - Culture and Development
Annually
Examines the diversity of ways in which humans grow and change throughout life. The varied sociocultural environments to which humans adapt are explored, highlighting both the universals and the variations that characterize development from birth to old age. Fulfills an Elective Course Requirement (Class of 2006) or a Developmental Processes Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 100. One unit.
Psychology 299 - Special Topics in Psychology
Annually
A first-time course offering. From time to time courses on particular topics will be offered. Fulfills an Elective Course Requirement. One unit.

## Psychology 315 - Biology of Mental Disorders

Alternate years
An in-depth consideration of the historical and philosophical basis of biological psychiatry. A thorough overview of the major neurotransmitter systems and behavioral genetics precedes course topics that examine the current understanding of the biological aspects of major psychological disorders, including anxiety disorders, psychosomatic disorders, affective disorders (unipolar and bipolar depression), schizophrenia, and Alzheimer's disease. For each of these disorders, the current state of knowledge concerning modes of treatment are reviewed, with an emphasis on the relative efficacy of pharmacotherapeutic agents, including minor tranquilizers, antidepressants, and antipsychotics. Fulfills an Advanced Course Requirement (Class of 2006) or an Elective Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 221 or Permission of instructor. One unit.
Psychology 316 - Drugs of Abuse
Alternate years
Drug addiction is the central theme of this course. Understanding drug action begins with a consideration of how drugs affect the brain. A basic working knowledge of brain chemistry is established with emphasis on information concerning the various major neurotransmitter systems that are affected by drugs of abuse. Considered next are the different addictive drugs, including alcohol, cannabis, heroin, cocaine and amphetamines, and the hallucinogens, and specific issues pertaining to the drug addict. The impact of drugs and addiction on society is the subject of the last part of the course. Issues with regard to prevention and treatment are considered. The ultimate goal of this course is to provide sound biological and psychological information from which a rational drug policy can be formed. Fulfills an Advanced Course Requirement (Class of 2006) or an Elective Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 221 or Permission of instructor. One unit.
anatomy and function. Structure is studied to provide a foundation for understanding clinical applications of nervous system injury and disease. Begins with study of gross anatomy of the sheep brain. Topics include motor and sensory systems, limbic system, cranial nerves, cerebral cortex, and blood supply to the brain. Fulfills an Advanced Course Requirement (Class of 2006) or an Elective Course Requirement (Classes of 2007 and beyond). Prerequisite: Permission of instructor. One unit.

## Psychology 325 - Cognitive Development

Alternate years
Focuses on the various facets of children's thinking, from perceptual processes to complex problemsolving and reasoning. Important theoretical perspectives, including those of Piaget and Vygotsky, are considered. In addition, empirical findings that describe how children think and the forces that influence the development of cognition are discussed. Fulfills an Advanced Course Requirement (Class of 2006) or an Elective Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 225 and permission of instructor. One unit.
Psychology 342 - Seminar: Gender-Role Development
Alternate years
Provides an examination of the role that gender plays in psychological development. Topics include depression and self-esteem, aggression, emotion control and emotion expression, and social interaction. Theoretical perspectives as well as the empirical literature on gender development will be explored to assess the nature of gender-patterned behaviors. Fulfills an Advanced Course Requirement (Class of 2006) or a Seminar Course Requirement (Classes of 2007 and beyond). Prerequisite: Permission of instructor; Psychology 225 recommended. One unit.
Psychology 343 - Seminar: Psychodiagnosis
Alternate years
An advanced seminar focusing on philosophical, historical, and methodological aspects of diagnosing mental illness. The centerpiece of this course is an in-depth analysis of a series of clinical cases. Students develop a thorough understanding of reliable and valid diagnostic criteria and interviewing procedures. Fulfills an Advanced Course Requirement (Class of 2006) or a Seminar Course Requirement (Classes of 2007 and beyond). Prerequisite: Permission of instructor. One unit.

## Psychology 344 - Seminar: Theories of the Person

Alternate years
Explores classic and contemporary approaches to understanding personality. Questions considered include: How much of personality is determined (by one's genes, childhood, or environment)? Do people have enduring traits or dispositions, or is personality a function of the situation? Have personality types changed through history, and do they vary across cultures? Can people be classified into "types" or can you only really know a person in her uniqueness? Do different personality theories generate different conceptions of what is normal and abnormal? What are the social consequences of using different theories to classify human beings? Course addresses these issues through reading and discussion of works by psychoanalytic, humanistic, cognitive, behaviorist, and social constructionist theorists. Fulfills an Advanced Course Requirement (Class of 2006) or a Seminar Course Requirement (Classes of 2007 and beyond). Prerequisite: Permission of instructor. One unit.

## Psychology 345 - Seminar: Face Perception

Alternate years
Investigates the vast amount of information available from faces, such as age, gender, emotions, traits, and aesthetics. Discussion focuses on how we encode and remember faces and how we use information from faces in social interactions. Fulfills an Advanced Course Requirement (Class of 2006) or a Seminar Course Requirement (Classes of 2007 and beyond). Prerequisite: Permission of instructor. One unit.

## Psychology 350 - Seminar: Sleep and Behavior

Annually
Focuses on the complex relation between sleep, circadian rhythms, and behavior across the lifespan. Topics include: sleep architecture, developmental changes in sleep, "normal sleep," sleep deprivation,
and sleep disorders. Fulfills an Advanced Course Requirement (Classof 2006) or a Seminar Course Requirement (Classes of 2007 and beyond). Prerequisite: Permission of instructor; Psychology 221 recommended. One unit.

## Psychology 352 - Seminar: Modern Interpersonal Relationships <br> Annually

Provide a forum to systematically ask focused questions about, investigate, and discuss matters related to the development, maintenance, and problems of intimate relationships. By examining a variety of historic paths and human factors, we can attempt to describe and explain the current state of significant relationships, the personal and institutional problems that have arisen over the past 50 years, and ways in which the psychological health community currently attempts to remedy and prevent these problems. Fulfills an Advanced Course Requirement (Class of 2006) or a Seminar Course Requirement (Classes of 2007 and beyond). Prerequisite: Psychology 227 or 229. One unit.

## Psychology 366 - Seminar: Mind, Body, Health and Medicine

Annually
Examines a range of topics related to mind-body interaction, health care, and life style. Topics include nutrition and diet, stress and stress-reduction therapy, and a critical analysis of complementary and alternative medicine. This course should be of particular interest to premedical students considering a career in health care. Fulfills an Advanced Course Requirement (Class of 2006) or a Seminar Course Requirement (Classes of 2007 and beyond). Prerequisite: Permission of instructor. One unit.

## Psychology 399 - Seminar Special Topics

Annually
A first-time course offering. Seminars are offered in a variety of topics within psychology, are smaller than lecture courses, and provide an opportunity for more student participation and discussion. Fulfills an Advanced Course Requirement (Class of 2006) or a Seminar Course Requirement (Classes of 2007 and beyond). Prerequisite: Permission of instructor. One unit.
Psychology 470 - Directed Readings
Fall, spring
A reading program conducted under the supervision of a faculty member, generally focusing on an area of psychology not covered in-depth in course offerings. Fulfills an Elective Course Requirement. Prerequisite: Permission of instructor. One unit.
Psychology 480 - Research Projects
Fall, spring
Students may undertake an independent research project under the direction of a particular faculty member. Fulfills an Elective Course Requirement. Prerequisite: Permission of instructor. One unit.

## Religious Studies

Alan J. Avery-Peck, Ph.D., Kraft-Hiatt Professor in Judaic Studies, Professor and Chair
John E. Brooks, S.J., S.T.D., Loyola Professor of Humanities
Todd T. Lewis, Ph.D., Professor
Frederick J. Murphy, Ph.D., Professor
William E. Reiser, S.J., Ph.D., Professor
Mary E. Hobgood, Ph.D., Associate Professor
Alice L. Laffey, S.S.D., Associate Professor
James B. Nickoloff, Ph.D., Associate Professor
Joanne M. Pierce, Ph.D., Associate Professor
Mathew N. Schmalz, Ph.D., Associate Professor
Bernadette J. Brooten, Ph.D., Kraft-Hiatt Professor of Christian Studies at Brandeis University, Adjunct Professor
Rosemary P. Carbine, Ph.D., Assistant Professor
William A. Clark, S.J., S.T.D., Assistant Professor
Ibrahim Kalin, Ph.D., Assistant Professor
Caroline E. Johnson Hodge, Ph.D., Visiting Assistant Professor
William M. Shea, Ph.D., Visiting Professor
Gary P. DeAngelis, Ph.D., Lecturer and Associate Director, Center for Interdisciplinary and Special Studies Mary M. Doyle Roche, Cand. Ph.D., Visiting Instructor
The Department of Religious Studies has a two-fold function: serving the general student body in a liberal arts college, and preparing students who wish to concentrate in the area of religious studies for their future work.

Believing that religion is a fundamental dimension of the human experience that deserves to be studied for that reason alone and recognizing that students are in the process of coming to terms with their own traditions and personal identities, the department has designed courses that enable students to achieve both of these purposes. Since Holy Cross is a Jesuit college and the majority of its students come from the Roman Catholic tradition, the department offers courses that provide them with an opportunity to know and understand their Catholic tradition and situate that tradition in the larger context of other religious traditions and in the broader cultural context in which we live. Such courses are also important for students from other traditions, who similarly must come to terms with the fact of pluralism, both religious and cultural. Departmental courses are designed to help all students achieve this goal.

Because the field of religious studies is multidimensional, our program for majors acquaints students with the diverse aspects of the phenomenon of religion-world religions, bible, theology, ethics-as well as enables them to pursue in-depth the particular area of their own interest. A major is required to take a minimum of 10 and a maximum of 14 courses in the department, including one course in each of the following five areas: World Religions; Old Testament; New Testament; Theology; Ethics; and two intensive courses (seminars or tutorials) in the student's area of concentration. For those students who intend to pursue graduate studies, the department strongly advises competence in the classical and modern languages, as well as the social sciences and philosophy, and encourages an independent research project in the fourth year.

Tutorial reading programs and individual research projects are available to the qualified student by arrangement with the appropriate department faculty and the Chair.

## Religion/Religions

## Introductory Courses

Religious Studies 101 - Introduction to the Comparative Study of Religion Annually An introduction to the nature and place of religion in the human experience as critically understood through the modern disciplines of comparative history, text criticism, and social science. Viewpoints covered include the psychoanalytic, philosophical, biological, artistic, and anthropological. Sources range broadly from the Bible to modern fiction, Lao Tzu to Celtic myths. The course also examines the effects of modern change on religion in global perspective. One unit.

Religious Studies 120 - Comparative Religions/World View
Fall
A systematic exploration of similarities and differences within and among several traditions (Hinduism, Christianity, and Islam) and an examination of several key issues within the academic study of religion. One unit.

## Religious Studies 147 - Introduction to Judaism

Annually
An introduction to the history, theology, and practices of the Jews which uses the evidence of Judaism to exemplify the interrelationship between a religious civilization and the historical and cultural framework within which it exists. How does what happens to the Jews affect their formulation of their religion, Judaism? By answering this question and by learning the details of Jewish belief and practice, students will come to comprehend both Judaism and the social construction of religion in general. One unit.

## Religious Studies 149 - Judaism in the Time of Jesus

Alternate years Judaism as we know it took shape in the first six centuries C.E., in roughly the same period that saw the emergence of Christianity. This course describes and interprets early Judaism against its historical backdrop, evaluating the theological beliefs and ritual practices Jews developed and espoused. Our main focus is Judaism's central theological conceptions, concerning, e.g., life-after-death, the messiah, divine providence, revelation. Our larger goal is to comprehend how religious ideologies respond to and make sense of the world in which the adherents of the religion live. One unit.

Religious Studies 161 - Religions: China and Japan
Introduction to the history and phenomenology of the religions of China and Japan. An examination of Confucianism, Taoism, Shintoism, Chinese-Japanese Buddhism and Zen Buddhism as an expression of reaction to the total human situation in which persons live. One unit.

## Religious Studies 195 - American Judaism

Alternate years
An evaluation of the history and ideologies of Jews in America as an example of contemporary religious life in general: why and how do modern people maintain religious affiliations? In what ways do their religions carry forward inherited ideals, and in what regards are they simply, or primarily, products of the modern period? These questions are answered through an examination of the character of the American Jewish community and an analysis of the perspectives of American Jews on contemporary social and political issues. Appropriate for students with no prior knowledge of Judaism or Jewish history. One unit.

## Intermediate Courses

## Religious Studies 204 - Hinduism

Spring
A survey of the religions of India, from ancient times until the present, through the distinctive beliefs, values and practices of the major orthodox traditions. Topics covered include Vedic sacrificial polytheism, Upanishadic monism, Yoga, sectarian devotionalism, Hindu-Muslim syncretism, Modern reformers. The course utilizes textual, historical, and anthropological sources. One unit.

A survey of the Buddhist tradition, from its origins in ancient India through its evolution as a pan-

Asian faith. Topics include the legends of the Buddha, the early monastic community, the emergence of Theravada and Mahayana teachings, Buddhist ethics and social philosophy, meditation traditions, and the later development of distinctive Tibetan, Chinese, and Japanese schools. The course utilizes textual and anthropological sources. One unit.

Religious Studies 207 - Islam
Fall, spring
Examination of Islamic religious beliefs and practices from the origins of Islam to the present. Particular stress is placed on Islamic religious ideals, institutions and personalities. Central topics include: Islamic scripture and traditions, prophecy, law, rituals, theology and philosophy, sectarianism, mysticism, aesthetic ideals, art and architecture, pedagogy, and modern reinterpretations of the tradition. The course also explores wider issues of religious identity by looking at the diversity of the Islamic tradition, tensions between elite and popular culture, and issues of gender and ethnicity. One unit.

## Religious Studies 214 - The Modernization of Asian Religions: Seminar

Alternate years
How could Chairman Mao be turned into a deity on taxicab good luck charms? Are Japanese truly a "non-religious people?" Can India abandon its secular constitution to become a "Hindu nation"? How are Buddhist monks involved in adapting to the profound crises affecting their societies? This seminar addresses these issues and examines the modernization of Asian religions across the region, analyzing the impact of colonialism, the diffusion of scientific thought from Europe, and the impact of Protestant missions. Drawing upon recent research on Hinduism, Theravada and Mahayana Buddhism, Shinto, Daoism, and the "New Religions" of Japan, this interdisciplinary course draws upon studies from history, religion, and anthropology. One unit.

## Religious Studies 216 - Readings in Asian Religious Texts

Alternate years
This course focuses on critical and analytical readings of sacred writings in translation from the Asian religious traditions: Hinduism, Buddhism, Confucianism, Daosim. The genres sampled include law codes, works of ascetic mysticism, religious biography, popular narrative, and scholastic treatises. The course also examines the cross-cultural definition of "text," the idea of a "scriptural canon", and the construction of tradition in the western historical imagination. One unit.
Religious Studies 222 - Millennialism in Cross-Cultural Perspective
Alternate years
An examination of millennial and "end-time" beliefs in a variety of cultures around the world. Topics include: roots of millennial ideas, Jewish apocalypticism, beginnings of Christianity and Islam, the modern case studies from the Pacific Islands, China, Nigeria and the United States. The course elicits general conclusions regarding millennial and messianic ideas through detailed discussions of specific examples. Previous course work in religious studies, history, or anthropology is helpful but not required. One unit.

Religious Studies 233 - Islam and the West
Alternate years
An introduction to the long history of the Islamic world and the West. The early encounters between Islam and the West throughout the Middle Ages are illustrated by examining such fields of interaction as philosophy, science, education, and military-political history. Then we analyze the Western perceptions of Islam during the Renaissance and the Enlightenment, which paves the way for the modern Western conceptions of Islam and the Islamic world. Special attention is paid to the rise of the West as the superior power of the modern world and its impact on the relation of the two civilizations in negotiating patterns of encounter, challenge, rejection, reaction, and adaptation. The highly sophisticated network of media, academics, entertainment culture, and policy-making mechanisms also is analyzed to highlight the main sources of the current Western perceptions of Islam. This is followed by a discussion of various responses of the contemporary Islamic world to such challenges as modernism, secularism, and science and technology. The course concludes with the current roots of confrontation and the possibilities of mutual understanding between the two civilizations. One unit.
developments in the 18th and 19th centuries, we will discuss the decline of classical Islamic civilization, decentralization of Muslim political power, European colonialism, modernization, and the emergence of a new class of Muslim intelligentsia. Particular emphasis will be placed on intellectual currents, challenges of modern science and technology, and the responses of Muslims scholars and leaders. In addition to a short survey of the important social and political events in the 20th-century Muslim world, we will also analyze such issues as tensions between tradition and modernity, secularism, democracy, women, human rights, education, Islamic political movements, Sufism, Wahhabism, and Muslims in the West. One unit.

Religious Studies 255 - Ecology and Religion Alternate years Explores various perspectives on nature articulated in the history of the world's religions beginning with huntergatherer and tribal peoples. Distinctive doctrines derived from sacred texts and by philosophers/ theologians, as well as the impact of ritual practices, are reviewed to understand the impact of religion on human ecology. After considering the perspective of Enlightenment thought on the natural world, the course surveys early North American exponents of ecological spirituality (Thoreau; Emerson; Muir), the writings of Eco-theologians (Fox; Berry; Schweitzer; McFague), and how cosmologies articulated by modern ecologists (Leopold; Lovelock) and activists (Earth First! And Greenpeace) have sought to define as sacred the human connection with the natural world. One unit.

## Religious Studies 260 - Comparative Mysticism

Spring
A phenomenological analysis of mystical experience, both theory and practice, and an investigation of the epistemological and ontological status of this experience. The approach is pluralistic considering mysticism from the following perspectives: psychological, religious, anthropological, philosophical and scientific. The course examines various conceptions of ultimate reality and a variety of practices constituting the mystic path or way. Mystical experience is broadly conceived as a state of consciousness whose dominant symbols and structures of thought, behavior and expression relate to the ultimate transformation of self and world. One unit.

## Religious Studies 276 - Comparative Catholicisms Alternate years

A comparative examination of Catholicism in four broad culture areas: the United States, Europe, Africa and Asia. Topics include: inculturation, interreligious conflict, popular devotion and the cult of Mary, sanctity, Catholic charismatic and healing movements, as well as Catholic social and political resistance. Special attention is given to whether we can understand world Catholicism as a unified system of religious beliefs and practices. One unit.

## Religious Studies 277 - Modern Religious Movements

This course examines the phenomenon of modern religious movements within the United States. The movements considered are popularly known as cults, and one of our most important objectives will be to examine critically this term and other categories, such as brainwashing. The course ranges broadly, from a consideration of contemporary movements such as Scientology, the Branch Davidians, the People's Temple, and UFO Cults, to other groups that have experienced longer histories, such as the Latter Day Saints (the Mormons) and the Watchtower (Jehovah's Witnesses). Special attention is also given to contemporary religious movements within Catholicism. A consideration of modern religious movements is inevitably highly charged. The fundamental purpose of the course is to provide the analytic tools to consider not only modern religious movements themselves but also the discourse surrounding them. One unit.

## Advanced Courses

A seminar examining prominent movements within the Northern School of Buddhism, with particular attention to Indic, Tibetan, and east Asian developments. Topics include the Bodhisattva doctrine, Madhyamika and Hua-yen philosophies, Pure Land lineages, and the esoteric schools. The seminar focuses upon influential texts (Lotus Sutra, Vimalakirtinirdesa Sutra) and associated devotional practices. One unit.

## Religious Studies 311 - Zen Buddhism

Spring
An examination of Zen Buddhism and its influences on East Asian civilizations. The course surveys the texts and monastic practices that define Zen spiritual cultivation and the history of the Soto and Rinzai schools' evolution. Special attention is also devoted to the distinctive poetic (haiku), fine arts (painting, gardening, tea ceremony), and martial arts (swordsmanship) disciplines that this tradition has inspired in China and Japan. One unit.
Religious Studies 312 - Theravada Buddhism
Fall
A seminar examining the prominent texts, doctrines and practices of the Theravada Buddhist tradition. The course surveys the historical development of the tradition in India, with attention to major schools of interpretation and practice. Theravada social philosophy and ethics are studied, as are the patterns of accommodation with non-Buddhist religions. The second half of the course focuses upon the distinctive practices of Burma, Sri Lanka, and Thailand as well as reformist modern movements. One unit.

## Religious Studies 315 - Islamic Philosophy and Theology

Alternate years
An introduction to the major issues, figures, and texts of Islamic philosophy and theology, which represent two main intellectual perspectives in the Islamic tradition and have produced a vast literature. We shall first attempt to answer the question of what Islamic philosophy and theology are and how they figure in the larger context of Islamic tradition. While dealing with such towering figures of Islamic philosophy as Kindi, Farabi, Ibn Sina, Ghazali, Ibn Rushd, Ibn Hazm, Ibn Tufayl, Ibn Bajjah, Suhrawardi, the school of Ibn al-Arabi, Nasir al-Din Tusi, and Mulla Sadra, we will also discuss the central issues and concepts of Islamic philosophy, including existence (wujud) and essence (mahiyyah), God's existence and knowledge of the world, knowledge ('ilm) and its foundations, cosmology, causality ('illiyyah) and its role in sciences of nature, and political thought. Kalam or Islamic theology will be the focus of the second part of the course. We will examine classical Kalam debates around such issues as God's names and qualities, free will and determinism, reason and revelation, ethics, and political philosophy. One unit.

## Religious Studies 327 - The Holocaust: Confronting Evil

Every third year
An attempt to interpret an event that defies representation and lacks discernible logic or meaning. By evaluating how others have depicted, attempted to create meaningful narratives about, and drawn conclusions from the Holocaust, we hope ourselves to reach some understanding of this event, of its significance for modern society, and of its potential for helping us to recognize our own responsibilities in a world in which ultimate evil is possible. One unit.

## Bible

## Introductory Courses

An introduction to early Christian literature and thought in light of the historical, literary, and religious milieu of the Greco-Roman world, including Judaism. Topics discussed include the diverse of representations of Jesus, the emergence of the category "Christian," and the genres of New Testament and other early Christian books. Contemporary approaches are addressed, but the primary focus is the ancient texts themselves. One unit

## Religious Studies 122 - Jesus and His Contemporaries

Annually
A historical and theological study of Second Temple Judaism (520 B.C.E. to 70 C.E.) paying attention to the variety, richness and complexity of the Judaism of this period. Major Jewish groups are treated: Sadducees, Pharisees, Essenes, Priests, Scribes and Christians. Focus also is on apocalypse as a literary genre and apocalypticism as a worldview and social phenomenon. Attention is paid to the interrelatedness of belief, community structure, ethics, economics and politics. Special emphasis is placed on the ways in which Jesus has been seen to fit into this context. One unit.
Religious Studies 126 - Introduction to the Old Testament
Fall, spring
An introduction to the texts of the Hebrew Scriptures/Old Testament, the course explores the social and cultural worlds that produced the texts, examines the biblical texts themselves, and investigates the assumptions and methods employed by pre-modern, modern (post-Enlightenment), and postmodern interpreters of the Bible. One unit.

## Intermediate Courses

## Religious Studies 212 - The Gospels

Alternate years
An in-depth study of the theological concerns of Matthew, Mark, and Luke as reflected in their varying presentations of the Christian kerygma. Attention paid to the literary and historical character of each Gospel as a unique expression of the traditions about Jesus and an exploration of selected contemporary modes of theological reflection as models for understanding the Evangelists as theologians. One unit.

## Religious Studies 221 - Women in Early Christianity

Every third year
An exploration of the activity of women in the early church as witnesses to the resurrection of Jesus, missionaries, teachers, ascetics, martyrs, and deacons. This course considers the historical and social context of women's lives in the Greco-Roman world in an environment of religious pluralism, women's self-understanding, and the controversy over women's leadership in the developing church. Texts studied include the canonical gospels of Matthew, Luke, and John, the non-canonical Gospel of Mary and the Sayings of the Desert Mothers. One unit.
Religious Studies 229 - Paul the Apostle
Alternate years
A study of the writings, thought, and historical context(s) of the apostle Paul and the Christians who claimed his authority. Particular attention is paid to Paul's self-representation, to the positions he took on issues of vital concern to the first Christians, and to the diverse representations of both Paul and his teachings by second- and third-generation Christians. One unit.

## Religious Studies 232 - Women and/in the Bible

Every third year
This seminar focuses on the function of patriarchy in the biblical texts, in the ancient world that produced the texts, and in the interpretation of the Scriptures throughout history. It introduces feminism as a principle of social organization that assumes the equality of women and men and that functions as a challenge to unexamined hierarchical presuppositions. Selected biblical texts are then examined using feminist methodologies. One unit.

## Advanced Courses

Religious Studies 301 — Quest for the Historical Jesus
Since the Enlightenment, scholars have recognized the difficulties involved in trying to recover the historical Jesus. This course acquaints the student with the exegetical and historical problems encountered
in the quest for the historical Jesus; reviews the history of scholarship to the present to determine presuppositions, methods and results; examines the range of options currently available and the exegetical strategies used to support those options; encourages the student to take up an option and defend it. One unit.

## Theology

## Introductory Courses

## Religious Studies 114 - Introduction to Theology

Annually
This course provides an introduction to major claims in Christian theology through a close examination of contemporary theologies. Topics include: methods in doing theology and in biblical interpretation; images of God and of Jesus; the human condition; different marks and models of the church; and religious diversity. Readings address the interplay in theological reflection between religious tradition and social location, and analyze the implications and challenges of Christian claims in light of gender, race and poverty. One unit.

Religious Studies 115 - The Church in the World
Annually
A basic presentation of how the Catholic Church sees itself, its mission, and its ministry in today's world in light of the major decrees of the Second Vatican Council. Topics include: different models of the Church and the Church's approach to contemporary issues of justice and peace as reflected in Catholic social teaching of the popes and national conferences of bishops. One unit.

## Religious Studies 116 - Introduction to Catholicism

Fall, spring
Introduces students to the basic doctrine of Roman Catholic Christianity and to the situation of the church in the contemporary United States. Topics include: differing approaches to Catholicism; doctrinal foundations of the Church; structure, authority, and diversity; spirituality, worship, and the sacramental tradition; Vatican Council II; Catholic moral teaching; the role of women; Catholicism and other religions; and current issues in Catholicism. One unit.

Religious Studies 117 - History of Christianity 1
Fall
This course provides a survey of the origins and development of Christianity, both its theology and its structures, from the apostolic period to the eve of the Reformation. Special attention is paid to the evolution of Christian doctrine and worship during the early and medieval periods of the Christian history. The interplay between orthodoxy and heterodoxy will be stressed in a close examination of heretical movements and their impact on the formation of the tradition. The interaction between Church and society will also be addressed. One unit.

## Religious Studies 119 - History of Christianity 2

Spring
This course provides a survey of the development of Christianity, both its theology and its structures, from the Reformation period to today. Special attention is paid to the development of the various Protestant traditions, and their doctrine and worship. The interplay between Roman Catholicism and the Protestant churches will be discussed. The impact of these Christian traditions on American society will also be addressed. One unit.

Religious Studies 133 - Contemporary Christian Spirituality
Annually
An introduction to Christian spirituality understood as discipleship. Examines the lived experience and writings of influential 20th-century Christians such as Dorothy Day, Thomas Merton, Martin Luther King, Jr., and Gustavo Gutierrez. The course focuses on the quest for justice as an imperative of faith. One unit.

Religious Studies 139 - Understanding Jesus Fall, spring
An examination of the figure of Jesus as presented in the gospels with attention devoted to historical questions about Jesus' life and teaching, the theological claims about Jesus being made by the evangelists, and the direct challenge which the gospel story presents to the church and the world today. One unit.

## Intermediate Courses

Religious Studies 200 - Reformation \& Counter Reformation
Alternate years in spring The most significant political, intellectual, and religious developments of the Protestant and Catholic Reformation movements in 16th- and 17th-century Europe. Cross-listed in the Department of History as History 248. One unit.

## Religious Studies 217 — Eucharist: History and Theology Alternate years

This course provides a detailed study of the historical development and theological significance of the Eucharist in Christian tradition. It treats underlying concepts in sacramental theology in terms of Eucharistic ritual. Special attention is paid to the Roman Catholic experience, but other Christian traditions will be discussed. One unit.
Religious Studies 218 — Sacramental Theology
Alternate years
This course provides a general study of the historical development and theological significance of Christian sacraments. It begins with discussion of key underlying concepts in sacramental theology: the experience of the sacred; sign, symbol, ritual; and Christ/Church as sacrament. Special attention is paid to the Roman Catholic experience, but other Christian traditions are discussed. One unit.

## Religious Studies 219 - Christian Prayer in Theory and Practice

Annually
This course considers Christian prayer as both a topic for theological study and a body of disciplines and practices. Topics include various ways of understanding Christian discipleship, different approaches to the meaning and purpose of prayer, various techniques for prayer, (including the contexts in which they have been developed and the practical advantages and problems that they carry), and basic theological approaches as both foundations for and results of various forms of prayer. Reading will draw from both classic sources and contemporary interpretations of Christian prayer. Weekly practicum sessions will focus on observing and/or participating in various forms of Christian prayer. One unit.

## Religious Studies 227 — God and Human Experience

Every third year
This course studies the important religious concept of revelation, but it does so with an eye to the ordinary ways in which the divine mystery presents itself to human beings. The course examines biblical writings and other narratives of faith in which men and women describe the religious dimension of their lives. One unit.

## Religious Studies 234 - Conflicts in the Church

Alternate years in fall This seminar examines selected issues which have generated considerable controversy in the contemporary Catholic church (i.e., liberation theology; women's leadership; birth control; abortion; divorce and remarriage; homosexuality). After a brief survey of the history and present state of ecclesiology, it examines the topics from an ecclesiological perspective, both in light of official Catholic church teaching and the viewpoints of so-called "progressive" and "neoconservative" theologians. Ecclesiological concepts covered include: infallibility; teaching authority of theologians and the magisterium; the sensus fidelium; legitimate dissent and the development of doctrine. One unit.

## Religious Studies 236 - Makers of Modern Theology

Alternate years
This seminar examines authors or schools of thought which have helped to shape modern theological thinking. Authors examined in years past include: Karl Barth, Dietrich Bonhoefer, Rudolf Bulltmann, Paul Tillich, Karl Rahner, Edward Schillebeeckx, Rosemary Ruether, Hans Küng, James Cone, Ada Maria Isasi-Diaz. Schools of thought represented include: liberal Protestant theology, process thought, transcendental Thomism, liberation theologies. One unit.

Religious Studies 243 - Theology of the New Testament
Alternate years
Drawing on contemporary biblical exegesis, this course explores both the major theological questions which the New Testament writers were addressing in their own time and place and the theological questions those writings force the Church of today to raise in light of our present historical and cultural circumstances. What is faith? What is salvation? What does the New Testament tell us about the mystery of God? Why does Christian religious experience lead us to think about the Church? How does the New Testament as a whole help us to face the concerns of today, such as Christianity's relationship to the oth-
er world religions, environmental justice, as well as the perennial thirst for the transcendent? One unit.

## Religious Studies 261 - Feminist Perspectives in Theology

Alternate years
This course introduces students to the critiques and alternative reconstructions that feminist/womanist/mujerista theologians present with respect to traditional Christian understandings of scripture, God, Jesus, creation, human personhood, sin, grace, the church, spirituality, and theological method. One unit.

## Religious Studies 262 - Church: Experience and Perspectives

Annually
This seminar is an exploration of ecclesiology-the church's theological understanding of itself-and also an exercise in observational learning. Students examine the nature of church by reading a variety of 20th-century theological works and official documents. They are also guided through semester-long fieldwork projects to explore aspects of church as lived and practiced in local communities. Seminar sessions discuss these observations in light of the course readings. One unit.
Religious Studies 275 - Latin American Liberation Theology
Annually
Based on the principle of God's special identification with history's outcasts, liberation theology explores the problems of biblical interpretation, Church teaching and Christian commitment in the contemporary world. With special reference to Latin America, the course examines the relationship between the sociopolitical consciousness of marginalized peoples and their Christian faith. One unit.

Religious Studies 285 - Introduction to Jesuit Spirituality
Spring
This seminar introduces students to the basic elements of Jesuit spirituality, starting with key writings of Ignatius Loyola and his rootedness in the Christian ascetical tradition, and then examining contemporary expressions of the Ignatian vision. A major aim of the course is to help students integrate the academic, religious or spiritual, and civic or service dimensions of their undergraduate experience. This course is open to fourth-year students only. One unit.

## Religious Studies 292 - Medieval Christianity

Alternate years
This seminar provides an in-depth study of the origins and development of medieval Christianity in Western Europe. It covers theology and structural evolution from the fall of the Roman Empire to the eve of the Reformation. Special attention is paid to the evolution of Christian doctrine, spirituality, architecture and worship during the "high" and "late" Middle Ages, the interplay between orthodoxy and heterodoxy, their impact on the formation of the tradition, and the interaction between church and society. One unit.

## Advanced Courses

Religious Studies 333 - Comparative Theology
Spring
An exploration of the meaning and significance of Christianity's encounter with the Hindu, Buddhist, Islamic, and other religious traditions, both new and old. The course investigates major theological questions emerging from the dialogue between Christianity and other world religions. One unit.
Religious Studies 353 - Theology and Ecology
Alternate years
This seminar provides an opportunity to participate in the conversation currently underway regarding religious faith and contemporary ecological concerns; it seeks to develop a greater consciousness of the interdependence between human beings and other living beings, and between all life forms and non-living created matter. What does it mean to do biblical interpretation and Christian theology at the beginning of the third millennium in a global context that is developing an ever greater awareness of the limited nature of natural resources and an ever increasing appreciation of created matter in the cosmos? One unit.

Examines selected theological questions addressed by modern Catholic theologians such as Rahner, Schillebeeckx, Dulles, Tracy, Gutierrez, and Ruether. Several major works are read and discussed in detail. One unit.

Religious Studies 371 - Contemporary Christology
Fall
A comparative analysis of the christological writings of major contemporary Catholic and Protestant theologians, with emphasis given to an examination of each theologian's understanding of the centrality of Jesus in modern society, the nature of the Scripture and what it reveals about Jesus, and the nature of faith in Christ and in His resurrection. Prerequisite: Cumulative GPA of 3.0 or better. One unit.

Religious Studies 376 - North American Theologies of Liberation
Annually
Explores recent theological reflection on the dynamics of oppression and liberation in the context of the U.S. The course attempts to sketch the outline of a theology responsive to both the liberating message of the gospel and the socio-political and cultural life of the United States with special attention given to Black, U.S. Hispanic and Gay/Lesbian theological works. One unit.
Religious Studies 395 - Saints and Sinners
Every Third Year
This seminar offers an examination of the historical and theological development of the ideals and practices of Christian life, from the Middle Ages to the Early Modern era. The focus is on "saints" and "sinners" as windows into the attitudes and values, the fears and hopes, the virtues and vices, the piety and the heresy, of western European culture. Special attention will be paid to the following themes: gendered perceptions of sanctity and sin; community and solitude; poverty and riches; feasting and fasting as religious and cultural activity. One unit.

## Ethics

## Introductory Courses

## Religious Studies 141 - Contemporary Christian Morality Fall

A suggested methodology for evaluating contemporary Christian thought and practice in major areas of ethical concern. An in-depth discussion of responsible decision-making in an age of situationism and ethical relativism, with detailed application to crucial moral dilemmas facing modern persons. One unit.

Religious Studies 143 - Social Ethics
Fall
An introduction to Christian ethical evaluation of such issues as impoverishment and economic justice, racism, and First World/Two-Thirds World relations in the struggle against war and the search for peace. One unit.

## Religious Studies 151 — Faith/World Poverty

Spring
This course investigates the historical and structural foundations of escalating world poverty. It explores the dynamics of 21st century capitalism and its international institutions as they are understood by the tradition of Catholic social teaching and by Christian communities in the United States and the TwoThirds World. The challenge facing people of faith has two sides: one is the reality of oppression and domination, and the other is that of liberation and self-determination. One unit.

## Intermediate Courses

Religious Studies 209 - War and Peace in the Christian Tradition

An introduction to some of the important ethical issues involved in war/peace studies. Beginning with an examination of the two major religious traditions, just war theory and pacifism/nonviolence, the course then turns to an examination of the experience of war by a focus on World War II and Vietnam. In light of an examination of both approaches to issues of war and peace and the experiences of war, the course concludes with a critical analysis of the American bishops' pastoral letter, The Challenge of Peace. One unit.
Religious Studies 230 - Theological Perspectives on Medical Ethics
Spring
This course deals with the basic issues in contemporary health care ethics from the standpoint of the Christian theological tradition. A central concern, then, is the relation between religious beliefs and individual or social choices regarding health and health care. One unit.

## Advanced Courses

Religious Studies 294 - Sexual Justice: A Social Ethic of Sexuality
Alternate years
Analyzes sexuality within a broader system of class, race, gender and disability dynamics. Drawing upon expanding work in Christian ethics, feminist theory, and class and race analyses, the course focuses on the ways sexual love and happiness are connected to larger issues of cultural, political and economic well-being. One unit.

## Religious Studies 335 - Economics and Ethical Values

Alternate years
Investigates the ethical dimensions of contemporary economic issues such as the restructured labor market, income and wealth distribution, the extent of globalization, the international debt crisis, and alternative economic models. Focus also includes the economic dimensions of race and gender relations and their relevance to economic justice. One unit.
Religious Studies 337 - Character and Ethical Responsibility
Fall
This seminar will address the problems of moral weakness and the agent's ethical responsibility for acts of weakness from the perspectives of philosophy, theology, psychology, film and modern fiction. The term moral weakness is a translation of the Greek word akrasia. Akrasia refers to a moral agent's perceived ability to perform an action that he or she knows to be evil, or failing to perform an action known to be good. Thus an inquiry into the problem of moral weakness is ultimately an inquiry into character and virtue. One unit.

## Religious Studies 342 - Sexual Ethics

Fall
This seminar will provide students with an opportunity to explore ethical issues of both personal and societal importance. Among the topics covered are historical development of Christian sexual ethics; embodiment; gender; and significance of the relation between sexuality, love and reproduction. One unit.

## Special Topics

Religious Studies 199 - Special Topics
Fall, spring Introductory level courses on special topics in religion, theology, Bible, and ethics. One unit.

## Religious Studies 299 - Special Topics <br> Fall, spring

Intermediate level courses on special topics in religion, theology, Bible, and ethics. One unit.
Religious Studies 399 - Special Topics
Fall, spring
Advanced level courses on special topics in religion, theology, Bible, and ethics. One unit.
Religious Studies 411 - Tutorial
Fall, spring

One unit.

## Sociology and Anthropology

Stephen C. Ainlay, Ph.D., Professor and Vice President for Academic Affairs/Dean of the College
David M. Hummon, Ph.D., Professor
Susan Rodgers, Ph.D., Professor
Royce A. Singleton Jr., Ph.D., Professor
Victoria L. Swigert, Ph.D., Professor and Assistant Dean
Edward H. Thompson Jr., Ph.D., Professor and Chair
Carolyn Howe, Ph.D., Associate Professor
Jerry L. Lembcke, Ph.D., Associate Professor
James Bryant, Ph.D., Assistant Professor
Oneka LaBennett, Ph.D., Assistant Professor
Ann Marie Leshkowich, Ph.D., Assistant Professor
Susan Crawford Sullivan, Cand. Ph.D., Edward Bennett Williams Fellow, Instructor
Kimberly Hart, Ph.D., Visiting Assistant Professor
Leslie Killgore, Ph.D., Visiting Assistant Professor
Taku Suzuki, Ph.D., Visiting Assistant Professor
Susan M. Cunningham, Ph.D., Lecturer and Associate Director, Center for Interdisciplinary and Special Studies
Thomas M. Landy, Ph.D., Lecturer
Sociology and anthropology challenge students to examine the social and cultural dimensions of the contemporary world. As social sciences, these disciplines play a distinctive role in the liberal arts curriculum. Each combines a humanistic concern for the quality and diversity of human life with a commitment to the empirical analysis of culture and society. The department welcomes non-majors to courses and offers three avenues for specialized study: a major in sociology, a major in anthropology, and a minor in anthropology.

The sociology major is designed to provide a critical assessment of the modern world and knowledge of the latest issues in social theory and research. The curriculum features the analysis of cultures and social institutions, of social problems and social change, and of the contribution of social science to policy formulation and implementation. The major is appropriate for students with a wide range of educational and career interests including, but by no means limited to graduate study in sociology, health care management, communications, urban affairs, and gerontology, and to careers in business,
law, government, journalism, social services, and public health.
The sociology major consists of a minimum of 10 courses, including the following required courses: The Sociological Perspective (Sociology 101); Methods of Social Research (Sociology 223); The Development of Social Theory (Sociology 241); and one advanced 300 or 400 -level seminar, tutorial, or research practicum. A minimum of six departmental electives, selected in accordance with student interests and in consultation with a faculty advisor, complete the major. Two of these six electives may be anthropology courses.

The anthropology major, focused on sociocultural anthropology, offers students opportunities for the extended study of cultures outside the West. Our cross-cultural courses address Africa, Asia, Latin America, the Pacific, and the Middle East, often highlighting cultures in which Department faculty work: the Afro-Caribbean region, Bolivia, Indonesia, and Vietnam. Increasingly, anthropologists also study the industrialized West and our coursework also extends to such research (e.g., immigrants of Caribbean heritage in the United States). Our broad range of topical courses deal with political anthropology, art, law, religion, economic change, gender, youth culture, globalization, race, consumption and fashion. The program emphasizes hands-on fieldwork experience in our methods course focused on Worcester and its environs. Anthropology expands horizons for all students and can lead to further study or careers in law, development work, human rights endeavors, international business or journalism, and medicine, or to graduate studies in anthropology and the opportunity for research abroad.

The anthropology major consists of a minimum of 10 courses, including the following required courses: The Anthropological Perspective (Anthropology 101); Ethnographic Field Methods (Anthropology 310); Anthropological Theory (Anthropology 320); one advanced 300 or 400 -level seminar, tutorial, or research practicum; and six additional department electives. Two of these six electives may be sociology courses. All electives are chosen in accordance with student interest and in consultation with a faculty advisor.

The anthropology minor is available to students in any major except sociology. Like the major, the minor provides students with the opportunity to explore non-Western but also Western cultures from an anthropological perspective. The minor consists of six courses: The Anthropological Perspective (Anthropology 101); Ethnographic Field Methods (Anthropology 310); and four additional anthropology courses chosen with the advice of the anthropology faculty.

The department maintains an active advising program. Faculty advisors also work closely with individual advisees to clarify course offerings and discuss academic and career goals. The department encourages students to pursue interdisciplinary concentrations, internships, and study abroad, and it provides advice on how to integrate these activities into a course of study. Appointment to membership in Alpha Kappa Delta, the national honor society in sociology, gives recognition for distinguished academic achievement in sociology.

## Sociology

## Introductory Courses

Sociology 101 - The Sociological Perspective Fall, spring
A one-semester introduction to the principles of sociological analysis. Through a critical examination of selected topics and themes, this course develops a sociological perspective for the interpretation and understanding of cultural differences, age and sex roles, discrimination, the family and the workplace, bureaucracies, stratification, the problems of poverty. One unit.

## Sociology 155 - Social Psychology

Annually
A survey of the interdisciplinary field of social psychology. Students are acquainted with: 1) the nature of the field and its range of topics, including person perception, attitudes, attraction, social interaction, and social influence processes; and 2) the theories, models, and methods used to understand human social behavior. One unit.

## Intermediate Courses

## Sociology 203 - Race and Ethnic Relations

Annually
An examination of 1) various processes of racial and cultural contact between peoples, especially in regard to the origin and development of American minority groups; 2) various theories of racial and ethnic oppression; and 3) minority responses to oppression. Prerequisite: Sociology 101. One unit.

## Sociology 205 - Structures of Social Inequality

Every third year
This course examines American class structures and processes from a sociological perspective, acknowledging the unequal distribution of resources and investigating aspects of institutionalization serving to support such inequality. Course topics focus on the various social, economic, and political indicators of an individual's position in society, including occupation, income wealth, prestige, and power. In addition, the course examines some of the factors and conditions associated with poverty and homelessness. Prerequisite: Sociology 101. One unit.

Sociology 217 - Criminology
Annually
The study of crime and society. Areas of focus include patterns of criminal behavior, theories of crime causation, and the administration of criminal justice. Prerequisite: Sociology 101. One unit.
Sociology 223 - Methods of Social Research Fall
An introduction to the logic and procedures of social scientific research. Readings, lectures, and laboratory exercises are directed toward the development of skills in theory construction, research design, operationalization, measurement, data collection, analysis and interpretation. Prerequisite: Sociology 101. One unit.

## Sociology 241 - Development of Social Theory

Spring
A descriptive and critical study of the 19th- and early 20th-century social thought which informs contemporary sociological theory. Some attention is given to historical influences on emerging sociological theory. Emphasis is placed on four major theorists: Durkheim, Marx, Weber, Simmel and on the 20th-century developments in functionalism, symbolic interactionism and the sociology of knowledge. Prerequisite: Sociology 101. One unit.

Sociology 243 - African-American Social \& Religious Thought
Alternate years
This course is an introduction to the critical dimensions of African-American social and religious discourses on race, antiblack racism, African-American ethnic identity, and liberation. Students will review a number of social and religious criticisms about these concerns while examining the logic of these criticisms as the product of social and cultural forces. Prerequisite: Sociology 101. One unit.
Sociology 245 - Modernity: Culture, Consciousness, and Institutions
Alternate years
An examination of some of the ways in which modernity constitutes what might be called a "worldorganizing" system. Topics include technology, the rise of capitalism, and the effect of modernity on community and family life, religion, bureaucratization, loyalty, authority. Prerequisite: Sociology 101. One unit.

## Sociology 256 - Self and Society

Annually
Addresses the relation of the individual to society through the study of the self. Theoretical issues include human nature; the social and cultural construction of the self; subjective experience and selfconsciousness; social interaction, social structure, and the self; and the politics of identity. Emphasis on studies of everyday life in the symbolic interactionist, dramaturgical, and interpretive traditions. Prerequisite: Sociology 101. One unit.

## Sociology 257 - Aging and Society

Annually
A thorough introduction to the sociological study of people's experience of late life. Strives to increase awareness of the social, cultural, and historical variability of aging by examining people's own accounts of old age, social psychological adaptations, changing institutional involvements, and the confrontation with dying and death. Prerequisite: Sociology 101. One unit.

## Sociology 258 - Childhood

Annually
Childhood addresses the lives of children from early childhood to the beginning of adolescence. It explores childhood experiences and seeks to understand how they are shaped by the immediate social worlds of children and the institutional structures and culture of the larger society. Topics include modern and postmodern childhoods, social problems and children, and preadolescent peer culture. Prerequisite: Sociology 101. One unit.

## Sociology 259 - Children and Violence

Every third year
An analysis of violence issues pertaining to children, including family, street, and school-based causes and consequences. In addition to theoretical explanations of violence, consideration is given to prevention and intervention strategies and relevant policy implications. Prerequisite: Sociology 101. One unit.

Sociology 261 - Sociology of Religion
Annually
An analysis of religion as a socio-cultural product. Emphasis on the interrelationship between religion and society in a cross-cultural perspective. Major topics include the social functions of religion, the organization of religious practice, and the impact of social change on religion. Prerequisite: Sociology 101. One unit.

Sociology 263 - Medical Sociology
Alternate years
A critical study of the institution of modern medicine. Special attention is paid to socio-cultural and political factors influencing susceptibility, diagnosis and treatment. Topics include the social meaning of disease, patienthood, the medical profession, and the organization of medical care. Prerequisite: Sociology 101. One unit.

## Sociology 265 - Sociology of Work and Labor

Every third year
This course focuses on topics related to the study of work and labor in the United States today. The course has a strong historical dimension and some of the material crosscuts sociology, history, and economics. Prerequisite: Sociology 101. One unit.

## Sociology 266 - Sport and Society

Annually
A critical analysis of sports as social phenomena. Topics include sports and socialization; sports and children; deviance and aggression and sports; gender, race, ethnicity, social class and sports; and sports in relation to the economy, the media, politics, and education. Prerequisite: Sociology 101. One unit.

Sociology 271 - The Family
Alternate years
Examination of patterns in American family behavior. Strives to increase awareness of the social, cultural, and psychological facets of family life by examining kinship relations, child socialization, dating behavior, patterns of sexual activity, parental decisions, family development, divorce, violence in the family. Prerequisite: Sociology 101. One unit.
Sociology 275 - The Sociology of Men
Alternate years
Examines men's experiences as men and cultural blueprints for male role. Topics include men's antifemininity, homophobia, inexpressiveness, success-orientation, relations with family, and grandparenting. Prerequisite: Sociology 101. One unit.

## Sociology 276 - Women and Society

Annually
A sociological analysis of women in contemporary (primarily U.S.) society with a focus on the structural contexts that shape women's lives and place barriers on and provide opportunities for women's development. The political, economic, cultural, and personal dimensions of women's experiences are examined with attention given to racial-ethnic and class differences. Women's struggles for social change and self-definition are explored through case studies and an examination of current issues. Prerequisite: Sociology 101. One unit.

Examines the origins, experiences, influence, and future prospects for Latinos in the United States. Topics include: the origins of Latin-American immigration into the United States, the diversity of Latino cultures, the relationship between Latino communities and other racial-ethnic communities in their local environment, and organizational and cultural forms of resistance, adaptation, and survival by Latino groups. Course includes a practicum experience in the Worcester Latino community. Prerequisite: Sociology 101. One unit.

## Sociology 299 - Special Topics

Annually
These intermediate level courses address selected sociological issues not covered by the regular curriculum. They are offered on an occasional basis; topical descriptions for specific offerings are available before the enrollment period at the departmental office. Prerequisite: Sociology 101. One unit.

## Advanced Courses

## Sociology 325 - Research Practicum

Alternate years
An advanced research seminar, and hands-on opportunity for social scientific research, emphasizing the involvement of students in the whole research experience including formulation of the problem, instrumentation, quantitative and qualitative interview techniques, data analysis, and the interpretation of findings. Prerequisite: permission of instructor. One unit.

## Sociology 341 - Sociology of Knowledge

Alternate years
This advanced seminar provides a forum for the discussion of classical and contemporary writings in the sociology of knowledge. This conversation will consider such topics as the role of consciousness in the production of knowledge, the impact of language on perceptions of reality, and the ethics and politics of knowledge. Prerequisite: Sociology 101. One unit.
Sociology 357 - Small Group Processes
Alternate years
An introduction to the study of small groups. Topics include social influence processes, group development, and group structure. A major part of the class involves experience-based learning. Prerequisite: Sociology 101 or 155; permission of instructor. One unit.
Sociology 360 - Sociology of Education
Annually
A critical examination of education in the U.S., with a special emphasis on public schooling. This course considers how the functions and goals of education have changed over time, factors leading to the current crisis in education, and controversial programs for fixing the problems such a vouchers, charter schools, and multicultural education. Prerequisite: Sociology 101, permission of instructor. One unit.

## Sociology 371 - Family Issues

Every third year
An advanced topical course providing a critical analysis of social structural processes that foster and maintain family stresses and conflict. The course examines the bearing of sources of family diversity (e.g., culture, political economy) on such stresses as single-parenting, health, devitalized relations. Prerequisite: Sociology 101, permission of instructor. One unit.
Sociology 375 - Men and Violence
Every third year
A research-based seminar that examine the ways masculinities are associated with interpersonal violence, especially the violence within dating relationships. The semester involves reading original texts in the sociology of men, learning how to use SPSS and analyze available survey data, and developing an original research project and paper on men and violence. Prerequisite: Sociology 101, permission of instructor. One unit.
Sociology 380 - Sociology Capstone.
Annually
This seminar is designed as a final course for majors. Students examine fundamental sociological ques-
tions, apply methodological skills in original research, and think reflexively and sociologically about their identities as senior Holy Cross students and members of American society. Prerequisites: Sociology 101, Sociology 223, permission of instructor. One unit.

## Sociology 399 - Selected Topics in Sociological Analysis

Annually
A critical examination of selected topics utilizing sociological theory and research methods. Topic and staff rotate. Prerequisite: permission of instructor. One unit.

## Sociology 494, 495 — Directed Research

Fall, spring
Students may undertake independent research projects under the direct supervision of a faculty member. Individuals contemplating a research project should make inquiries during their third year, since the project is usually initiated by the beginning of the fourth year. Preference for sociology majors. Prerequisite: permission of instructor. One unit each semester.

## Sociology 496, 497 — Directed Reading

Fall, spring
An individualized reading program generally addressing a topic in sociology not covered in course offerings. These reading tutorials are under the supervision of a faculty member in sociology, usually limited to the fourth year, and arranged on an individual basis. Open to selected students with a preference for sociology majors. Prerequisite: permission of instructor. One unit each semester.

Sociology 498, 499 - Special Projects
Fall, spring
Program for individual students who wish to pursue supervised independent study on a selected topic or an advanced research project. Ordinarily projects are approved for one semester. Open to selected third- and fourth-year students with preference to sociology majors. Each project must be supervised by a faculty member. Prerequisite: permission of instructor. One unit each semester.

## Anthropology

## Introductory Courses

## Anthropology 101 - The Anthropological Perspective

Fall, spring
A one-semester introduction to the main modes of cultural anthropological analysis of non-Western cultures, such as those of Latin America, Southeast Asia, Melanesia, Polynesia, sub-Saharan Africa and Native America. Topics include: ethnographic methods; concept of culture; symbolic communication; ecological processes; introduction to anthropological approaches to kinship, religion, gender, hierarchy, economics, medicine, political life, transnational processes. One unit.

## Anthropology 130 - Anthropology of Food

Annually
Food lies at the heart of human social systems worldwide, as symbolic good, gift, and token of love and political control. This course addresses such topics as: gender hierarchies, eating, and food; foods such as sugar and chocolate and colonial systems of power; food/body/power dynamics; food and social identity construction; and famine in a time of world plenty. Focus is on specifically anthropological approaches to food cultures in Asia, Africa, Latin America, with comparative material from the U.S. One unit.

## Intermediate Courses

## Anthropology 255 - Gender in Cross-Cultural Perspective

Every third year
A comparative, cultural anthropological examination of the way diverse non-Western cultures define femininity and masculinity. Drawing on ethnographic studies from Melanesia, Southeast Asia, Africa, and other non-European regions, the course will analyze gender as a cultural construction in relation to other systems of social hierarchy. Prerequisite: Anthropology 101 recommended. One unit.
Anthropology 256 - The Imagined Body
Alternate years
In cultures worldwide, the ways that human bodies are thought about, controlled, manipulated, and put on public display are patterns that are often imbued with political dynamics of power and resistance.

This course draws on ethnographic material from Papua New Guinea, India, island Southeast Asia, east Asia, sub-Saharan Africa, and the contemporary United States to look at issues of body, gender, social hierarchy, and state power. Prerequisite: Anthropology 101 recommended. One unit.

Anthropology 260 - Constructing Race
Alternate years
An examination of "race" from an anthropological perspective, in order to further our understandings of the ways this socially constructed category has had, and continues to have, concrete impact in the United States, Latin America and the Caribbean. Topics include: the role anthropology has played in constructing racial categories, passing, multiracial identities, popular representations of "race," and identity politics. Prerequisite: Anthropology 101 recommended. One unit.
Anthropology 262 - Anthropology of Religion
Alternate years
A social scientific, cross-cultural consideration of religious worlds created in such locales as village and urban Indonesia, India, Papua New Guinea, and Africa, especially in terms of their power dynamics vis-a-vis social hierarchies. Covers classic topics such as the study of ritual and ecology, village myth, trancing, shamanism, witchcraft, and sorcery accusations, but also deals at length with such matters as the connections between Christian missions and empire. Also turns an anthropological gaze on contemporary US religions. Prerequisite: Anthropology 101 recommended. One unit.
Anthropology 265 - Cities and Citizens in Latin America
Alternate years
Offers a historical and ethnographic consideration of cities and urban life in Latin America, exploring such themes as urban migration and cultural borderlands; the social order of the city; systems of inequality; and criminality, violence, and urban danger. Prerequisite: Anthropology 101 recommended. One unit.

## Anthropology 266 - Violence, Culture and Law

Alternate years
An introduction to contemporary issues in anthropological theorizing about law, violence, and social control. With a focus on Latin America, this course provides a comparative understanding of legal systems, concepts of justice and punishment, and forms of social ordering. Prerequisite: Anthropology 101 recommended. One unit.

Anthropology 267 - Political Anthropology
Every third year
This course takes a broadly comparative and historical perspective, using cross-cultural analysis to understand the workings of politics and power in non-Western contexts. Topics to be covered include: colonialism and its impact on colonized populations; the formation of post-colonial national states; leadership, authority, and the construction of political subjects; and the links between local processes and global political systems. Prerequisite: Anthropology 101 recommended. One unit.
Anthropology 268 - Economic Anthropology
Every third year
An introduction to the issues, methods, and concepts of economic anthropology. This course places economic features such as markets, commodities, and money into a larger cross-cultural context by exploring relations of power, kinship, gender, exchange, and social transformation. Prerequisite: Anthropology 101 recommended. One unit.
Anthropology 269 - Fashion and Consumption
Annually
A comparative, cultural anthropological exploration of fashion and consumption as tools for the creation, expression, and contestation of social, cultural, economic, political, and individual identities. Topics to be covered include: sociological and semiotic theories of materialism and consumption, subcultural styles, colonialism, race, gender, veiling, globalization, and ethnic chic. Prerequisite: Anthropology 101 recommended. One unit.
Anthropology 270 - Youth Culture and Consumption in Comparative Perspective Annually A comparative, cultural anthropological exploration of how youth use cultural products such as music, fashion, film, television and the Internet in forming social identities and subcultures in a variety of set-
tings. The course draws on ethnographic material from the U.S., the Caribbean, Samoa and England to address how youth use popular cultural products in articulating and resisting ethnic, class, gender, and age-based identities. Prerequisite: Anthropology 101 recommended. One unit.

## Anthropology 274 - Art \& Power in Asia

Annually
How does art interrelate to political power, and to wealth? This course examines such questions in regard to the art of ancient kingdoms in Asia such as Cambodia's Angkor Wat and Indonesia's Borobudur. Also at issue are the contemporary arts of Southeast Asia, seen too through this anthropology of art lens. Additionally, the course looks at the power dynamics of international art collecting of Asian art and artifacts; the politics and aesthetics of putting Asian art into worldwide museums is also studied. Includes museum study tours. Prerequisite: Anthropology 101 recommended. One unit.
Anthropology 299 - Special Topics
Annually
These intermediate level anthropology courses address a variety of issues of contemporary ethnographic importance. Prerequisite: Anthropology 101 recommended. One unit.

## Advanced Courses

## Anthropology 310 - Ethnographic Field Methods

Annually
An examination of cultural anthropology's main data-gathering strategy: long-term ethnographic fieldwork of small communities, often located in non-Western cultures. Topics include: review of the methodology literature, participant observation, in-depth interviews, designing field studies, oral histories, spanning deep cultural divides via fieldwork. Often involves hands-on fieldwork in Worcester. Prerequisite: permission of instructor. One unit.

## Anth 320 - Theory in Anthropology

Alternate years
A historical examination of the development of different theoretical perspectives in cultural anthropology. The course explores, compares, and critiques different schools of thought about human society and culture, from the 19th to the 21 st centuries, looking at the ways in which anthropological scholars and those from related disciplines have attempted to understand and explain the human condition. Prerequisite: permission of instructor. One unit.

## Anthropology 370 - Television and the Family

Annually
This seminar investigates how the family and kinship are constructed on and around television, exploring questions such as: How are gender, ethnic, class and age-based identities formed in and through televisual portrayals of the family? Although the primary focus is on the American context, ethnographic investigations of India, China, England and the Caribbean will also be considered.
Prerequisite: Permission of instructor. One unit
Anthropology 380 - Culture and Politics of Coca and Cocaine
Every third year An historically and ethnographically oriented study of cultural phenomena related to drugs in the Americas. This course emphasizes the connections between peoples, cultures, and governments in North and South America. Prerequisite: permission of instructor. One unit.
Anthropology 399 - Selected Topics in Anthropological Analysis
Annually
A critical examination of selected topics utilizing anthropological theory and research methods. Topic and staff rotate. Prerequisite: permission of instructor. One unit.

Anthropology 494, 495 - Directed Research Fall, spring
Students may undertake independent research projects under the direct supervision of a faculty member. Individuals contemplating a research project should make inquiries during their third year, since the project is usually initiated by the beginning of the fourth year. Preference for sociology/anthropology majors. Prerequisite: permission of instructor. One unit each semester.
Anthropology 496, 497 — Directed Readings
Fall, spring
An individualized reading program generally addressing a topic in anthropology not covered in course
offerings. These reading tutorials are under the supervision of a faculty member in anthropology, usually limited to the fourth year, and arranged on an individual basis. Open to selected students with a preference for sociology/anthropology majors. Prerequisite: permission of instructor. One unit each semester.

Anthropology 498, 499 - Special Projects
Fall, spring
Program for individual students who wish to pursue supervised independent study on a selected topic or an advanced research project. Ordinarily projects are approved for one semester. Open to selected third- and fourth-year students with preference to sociology/anthropology majors. Each project must be supervised by a faculty member. Prerequisite: permission of instructor. One unit each semester.

## Theatre

Lynn Kremer, M.F.A., Professor
Steve Vineberg, Ph.D., Professor
Edward Isser, Ph.D., Associate Professor and Chair
William J. Rynders, M.F.A., Associate Professor
I Wayan Dibia, Ph.D., Visiting Fellow in Balinese Music, Theatre and Dance
Audra Carabetta, B.F.A., Lecturer
Kurt Hultgren, Lecturer, Costume Design
Meghan McLyman, M.A., Lecturer
Margarett Perry, M.F.A., Lecturer
Kaela San Lee, M.Ed., Lecturer
James Spencer, M.F.A., Lecturer
The Department of Theatre offers a variety of complementary perspectives on performance. Our acting classes combine western and eastern techniques for training body and voice while teaching the student to interpret dramatic texts. We offer dramatic literature and theatre history courses to place those texts in historical and thematic contexts and focus on them as a medium for performance. We provide dance courses grounded in an understanding of dance history as well as technique and composition, and design courses that explore visual interpretations of texts in performance. Our directing classes locate performance as an intersection of all of these disciplines and train students to read texts on several levels at once. Additionally, we teach classes in film and tutorials in playwriting and screenwriting. The Theatre Department also oversees the students who choose a Filmmaking minor through the Center for Interdisciplinary and Special Studies. We offer three of the courses required for the minor-Directing and two film history courses-as well as advise the capstone film projects.

The fully equipped Fenwick Theatre houses the major productions of the department and dance concerts. A range of studio productions (directed by both faculty and students), workshops, and classes takes place in The Studio (O’Kane 481), The Pit (O'Kane 37), and the Dance Studio (O'Kane 28). Work on any department production is open to all Holy Cross students, faculty, and staff.

The Department of Theatre offers a major with a 12 -course curriculum. The following courses are required: Theatre History 1, Basic Acting, Design and Technical Production, Voice in Acting, Shakespeare Through Performance, American Drama 1920 to Present, Modern Drama or Theatre History 2, and one semester of any dance course. Lab experience in Theatre Practicum is required for three semesters.

Depending on the student's interest in acting, directing, design, dramatic literature, theatre history, film or dance, electives are chosen from among the following: Scene Study, American Film, World Film, Film as Narrative, Selected American Stage and Film Artists, Political Theatre, Holocaust on Stage \& Screen, Kamikaze Acting, Audition Techniques, Scene Design, Lighting Design, Costume Design, Directing 1, Advanced Directing, Performance Recital, Performance for Audience, Dance Performance, Ballet 1-2 and 3-4, Modern Dance 1-2 and 3-4, Jazz 1-2, Balinese Dance 1-2 and 3-4, Dance Collective, and tutorials in production, film, playwriting, dance, directing, dramatic literature, or design.

The Holy Cross Department of Theatre is an accredited institutional member of the National Association of Schools of Theatre.

## Courses

## Theatre 101 - Basic Acting

Fall, spring
This course offers, through classroom exercises, improvisations and performance of scenes from plays, an approach to understanding, appreciating and practicing of the art of acting and theatre. One unit.
Theatre 110 - Theatre Practicum
Fall, spring
Participation in Department of Theatre major productions through regular rehearsals or weekly lab work on costumes, scenery, properties or lighting. Students must attend all technical and dress rehearsals and performances. This course is required with enrollment in Basic Acting, Design and Technical Production, Voice in Acting, Scene Study, Scene Design, Lighting Design, and Costume Design. It may also be required with topics classes in acting and design. One-half unit.

Theatre 125 - American Drama 1920 to Present
Alternate years
American plays from the early work of Eugene O'Neill through that of contemporary dramatists are explored as theatre (through film and video) and as dramatic literature. The course looks at drama in historical and thematic contexts and as the expression of major American playwrights. One unit.
Theatre 127 - Design and Technical Production Alternate years in fall
Examines the management structure, personnel, training, and responsibilities required to mount a live theatrical production during the planning, preparation, and performance phases. It also explores the function and responsibilities of the design team. Class projects and enrollment in Theatre Practicum provide practical experience in many areas. One unit.
Theatre 128 - Political Theatre
Every third year
Examines theatre and film that espouse a specific political point of view or simply present political content. The works on the syllabus deal with war, revolution, oppression, gender, cultural issues, the Holocaust, and populism, among other topics. One unit.
Theatre 131 - Balinese Dance 1-2
Fall, spring
Balinese Dance is a dance performance class which surveys the rich classical, contemporary, and folk traditions of music, mask, dance, and theatre from Bali, Indonesia. Hinduism plays a significant role in the performing arts of Bali and will be discussed in relationship to performance. Students will rehearse and perform with Gamelan Gita Sari, the Holy Cross gamelan orchestra. This course can be taken for two semesters. One unit.

## Theatre 140 - Holocaust on Stage and Screen

Alternate years
Uses dramatic literature and film to examine the Nazi policies of genocide that were initiated and enacted before and during World War II. Various representational strategies are analyzed and contrasted in an effort to gauge the relative effectiveness of artists to come to terms with these ineffable events. Issues examined include the relationship between a dramatic text and its historical model, the problem of transfiguration, the applicability of a structural model for organizing texts, documentary versus dramatic enactment, varying national viewpoints, the emergence of feminist and gay perspectives, and the problem of exploitation and revisionism. One unit.

A studio course open to students with previous dance experience. Focuses on technique and touches on aspects of jazz history and its relationship to music and social history. The class is for students who have taken one college dance course or have had at least six months of dance experience. This course can be taken for two semesters. One unit.

## Theatre 151 - Ballet 1-2

Fall, spring
Beginning ballet technique is offered for beginners and those with less than six months of experience. Work at the barre will introduce basic positions, vocabulary, concepts. Center practice will include simple across-the-floor combinations. This course can be taken for two semesters. One unit.

## Theatre 160 - American Film

Annually
Introductory course teaches the student how to read a movie. Films are presented by genre and conventional examples of each genre are paired with movies that play with, undercut, or expand the conventions. The syllabus includes American movies from 1930 to the present. One unit.

Theatre 161 - Theatre History 1: Classical to Romantic Alternate years Focuses on five periods in the history of western theatre: Classical Greek, Medieval, Renaissance, Neoclassical, and Romantic. Readings and viewings include plays by Aeschylus, Sophocles, Euripides, Aristophanes, Shakespeare, Molière, Racine, and others. One unit.

## Theatre 162 - Theatre History 2: Modern and Contemporary

Alternate years
Studies modernist movements in western theatre: realism, expressionism, surrealism, epic theatre, symbolism, and theatre of the absurd. Readings include plays by Ibsen, Strindberg, Shaw, Chekhov, O'Neill, Dürrenmatt, Brecht, Williams, Pirandello, Beckett, and Guare. Viewings include films by Lang, Pabst, Scorsese, and Cocteau. One unit.
Theatre 165 - World Film
Annually
Like American Film, this is an introductory course that teaches the student how to read a movie. However, the content is exclusively non-American films, viewed thematically and historically, as well as in their cultural contexts. The syllabus typically includes films from France, Italy, England, Japan, Sweden, Ireland, Spain, Mexico, Germany, Canada, and other countries. One unit.

## Theatre 170 - Modern Drama

Alternate years
Surveys the major aesthetic movements of the last century, employing dramatic texts and theoretical writings to illustrate successive ideas. Movements such as naturalism, symbolism, expressionism, surrealism, and the absurd are examined through a close reading of works by Ibsen, Chekhov, Shaw, Wedekind, Pirandello, Brecht, Beckett, and others. One unit.
Theatre 181 - Modern Dance 1
Fall, spring
A basic introductory modern dance technique course for beginners or students with less than six months of dance experience. Students will learn beginning modern dance exercises and movement combinations. The basic components of modern dance and its place in 20th-century art will be examined. This course can be taken for two semesters. One unit.

Theatre 202 - Voice in Acting
Annually
Students learn how to correct regionalisms, support the voice, and increase range in songs and dramatic texts. Healthy vocal production, flexibility, relaxation, and power are emphasized. Prerequisite: Theatre 101. One unit.

## Theatre 203 - Scene Study

Annually
An intensive scene study class. Plays ranging in style from contemporary to Restoration are analyzed and performed. Physical and vocal exercises from Basic Acting and Voice in Acting will be continued with the addition of period style work. Prerequisite: Theatre 101 and 202. One unit.

## Theatre 227 - Scene Design

Alternate years in spring
Principles of scenic design and script analysis are used to create an environment for the action of the play. The course includes a historical survey of scenic design, theatre architecture, period style, drafting, and rendering techniques. Work on a set for a Fenwick Theatre production provides practical experience. By permission. One unit.

## Theatre 228 — Lighting Design

Alternate years in fall
A study of the properties of light and the objectives of stage lighting in drama and dance, this course includes basic electricity and its control, lighting equipment, and drafting. Practical experience is obtained through designing and running a production. By permission. One unit.
Theatre 230 - Costume Design
Every third year
An introductory course which involves the student in the process of script and character analysis as it relates to costumes. It develops sketching and painting techniques as well as research of Greek, Renaissance, and 18th-and 19th-century fashion. Prerequisites: Theatre 101 and either 161 or 162 . One unit.

Theatre 232 - Balinese Dance 3-4
Fall, spring
Advanced Balinese Dance builds on the background and techniques covered in Balinese Dance 1; two semesters of Balinese Dance 1 are a prerequisite. Students delve more deeply into the traditions of Bali and perform more advanced repertoire in a concert setting. Students may take this course for two semesters with the permission of the instructor, progressing to advanced repertoire of both traditional and contemporary Balinese dances, including solos. Prerequisite: Two semesters of Theatre 131. One unit.

## Theatre 240 — Directing 1

Fall
Introduces students to the craft and theory of theatrical production. Students function as autonomous art-ists-writers, dramaturgs, and directors, producing a series of dramatic pieces in a workshop environment. This practical work is augmented by extensive scholarly research that provides a theoretical underpinning. Emphasis is placed upon conceptualization, composition, blocking, textual analysis, and working with actors. Prerequsite: Theatre 101. First-year students cannot take this course. One unit.

## Theatre 252 - Ballet 3-4

Annually
This ballet technique class is based on a traditional class format: barre, center practice, petit allegro, grand allegro. Students may take this course for a total of two semesters, progressing to phrasing and movement through space. Prerequisite: Two semesters of Theatre 151 or at least one year of dance experience. One unit.

## Theatre 263 - Selected American Stage and Film Artists

Every third year
This advanced course is an intensive study of the work of two playwrights and/or filmmakers. The authors on the syllabus vary, according to the current offerings of the Fenwick Theatre season and other considerations. By permission. One unit.
Theatre 282 - Modern Dance 3-4
Fall, spring
An intermediate-level modern dance technique class. Students grow in understanding the aesthetic of modern dance both by practicing modern dance exercises and combinations and by engaging in critical discussion of selected dance performances in class and on video. Students may take this course for a total of two semesters, progressing to choreography and performance. Prerequisite: Two semesters of Theatre 181 or at least one year of dance experience. One unit.

## Theatre 304 - Audition Techniques

Fall
This advanced class focuses on monologues. Students prepare contrasting audition pieces that will be juried at the end of the semester. The course is for fourth-year students only. Prerequisites: Theatre 101, 202, 203, and 360. One unit.
Theatre 340 - Advanced Directing
Spring
Explores advanced theories and practices of theatrical direction. The course begins with a series of
lectures that introduces the avant-garde ideas and practices of artists such as Grotowski, Beck, Chaikin, Serban, Wilson, Akalitis, Bogart, and Boal. Students are expected to put some of these ideas into production as they tackle a short classical piece (Greek or Elizabethan) and then mount a full-length one-act by a major figure of the modern theatre (e.g., Chekhov, Strindberg, O'Neill, Pirandello, Beckett). Prerequisite: Theatre 240 . One unit.
Theatre 360 - Shakespeare Through Performance
Spring
Functioning as scholarly artists in a laboratory setting, students-working from both the Folio and modern editions-master the rudiments of Shakespearean performance, become acquainted with historical and contemporary staging conventions, investigate the notion of textual integrity, and explore dramaturgical issues. Particular emphasis is placed upon the desirability and/or need to subvert problematic texts through performance. Prerequisites: Theatre 101 and 202. One unit.

## Theatre 361 - Film as Narrative <br> Every third year

This advanced course deals with narrative issues in film (point of view, time, structure, style, tone, adaptation). The syllabus includes American, British, French, Italian, Japanese and Scandinavian movies. One unit.
Theatre 370 - Kamikaze Acting
Every third year
Students write, coach, design, and act in original work that they develop. Directors, actors, and theorists who stretch the limits of performance-either stylistically, socially, or conceptually-serve as models for students. Prerequisites: Theatre 101 and 202. One unit.
Theatre 400 - Tutorial/Theatre
Fall, spring
Tutorials consist of directed study in selected theatre, dance, and film topics such as acting, directing, playwriting, literature, dance, stage management, set, costume, lighting and sound design, film, and screenwriting. Permission of the instructor is required. One unit.

## Theatre 405 - Performance Recital

Fall, spring
Designed for the individual needs of advanced acting students. Rehearsal and performance in a major production is the main basis of grading. Prerequisites: Theatre 101 and 203. Department permission is also required. One unit.
Theatre 406 - Performance for Audience
Fall, spring
Advanced acting work in a major role. Prerequisites: Theatre 101 and 203. Department permission is also required. One unit.

## Theatre 450 - Dance Performance

Fall, spring
Designed for the individual needs of advanced students doing movement-based work. Requires rehearsal and performance of major dance segments in a mainstage production. Prerequisite: Any dance course. Department permission required. One unit.

## Visual Arts

Virginia C. Raguin, Ph.D., Professor
Joanna E. Ziegler, Ph.D., Professor
Michael L. Beatty, M.F.A., Associate Professor and Chair
Robert H. ParkeHarrison, M.F.A., Associate Professor
John P. Reboli, S.J., Ph.D., Associate Professor
Susan P. Schmidt, M.F.A., Associate Professor
Alison C. Fleming, Ph.D., Assistant Professor
Cristi Rinklin, M.F.A., Assistant Professor
Lee Fearnside, M.F.A., Visiting Assistant Professor
Sally B. Moore, M.F.A., Lecturer
Naomi Ribner, M.F.A., Lecturer
Nicole Nicas Rovner, M.A., Lecturer
Leslie A. Schomp, M.F.A., Lecturer
The study of visual arts is designed to be an integral part of the liberal arts curriculum at Holy Cross. Its aim is to increase student sensitivity to the visual arts, to refine the powers of critical analysis, and to provide the student with the means of creative expression. The rich resources of the surrounding area, especially the museums and architecture of Worcester and Boston, form an integral part of the curriculum and the department provides students with opportunities for internships in these cities. Tutorials are available with individual faculty to allow students to design courses suited to individual needs. The department sponsors numerous programs for gaining a broad understanding of the practice and study of the arts today: lectures and demonstrations by visiting artists and critics, student presentations of seminar research in open fora, and regular trips to Boston and New York galleries and museums. There are two divisions in the Visual Arts Department, art history and studio art. Students may major or minor in either art history or studio art. Students may also combine a major in one area with a minor in the other.

Art history reveals the past not simply through a review of data, but through a search for transcendent values that inform creative expression. The field is unusually open to interdisciplinary cooperation, relating in special ways to studies in history, literature, religion, and philosophy. The practice of art history provides both cognitive and discursive skills to probe past developments and confront those of the present. It empowers students to see differences yet discern common links that in a global, complex, culture, becomes a means of welcoming the diversity of the present.

The art history major requires a minimum of 10 , a maximum of 14 courses. This includes: Introduction to the Visual Arts or Survey of Art, one studio course (e.g. 2D or 3D Fundamentals or Photography) which may be waived, and four courses distributed among the following five areas of the discipline: Ancient, Medieval, Renaissance/Baroque, Modern, Architectural History. The Concentration Seminar is for fourth-year students (mandatory for majors). Normally, it will be expected that the remaining three courses be taken as seminars offered by the Department of Visual Arts (History). Exceptions will be granted on an individual basis for students to substitute pertinent courses in other disciplines. Students may develop such sequences in consultation with their advisor after a written proposal has been reviewed and accepted by the Chair. Many art history majors choose Study Abroad as an integral part of their major, a decision enthusiastically supported and guided by the department.

The art history minor is available to students in any major, including the studio art major. The art history minor provides students with the opportunity to explore the history of visual images. The minor consists of six courses: The Introduction to the Visual Arts or Survey of Art History (required); three courses distributed among five areas of the discipline (Ancient, Medieval, Renaissance/Baroque, Modern, and Architectural Studies), and two additional electives chosen with the advice of the art history faculty. The Concentration Seminar is also available as an elective.

Studio art engages the student in the discipline of visual thinking, encouraging precise observation and creative invention, inspiring discussion and the development of flexible, innovative problem solving skills. The interested student and the aspiring artist study with practicing professionals to gain insight into the creative process and complex paths to creating art in a contemporary context. Studio classes demand commitment on the part of participating students to broaden their vision and draw connections between the classroom and the outside world. From the introductory to the advanced level, classes are "hands on" emphasizing an experimental attitude towards materials and the acquisition of both technical and conceptual skills. The department encourages the active exhibition of student work. There are ongoing shows in The Ramp and Fenwick Hall galleries. The student run arts organization GESSO sponsors exhibits in the Hogan Campus Center. Students with extensive previous experience may be allowed to bypass either 2D or 3D Fundamentals with a portfolio review by a studio faculty member. In such cases, students may move directly into intermediate level courses.

The studio art major requires a minimum of 10 , a maximum of 14 courses, beginning with 2 D and 3D Fundamentals. One additional drawing course is required. Majors are required to take at least two sequential courses in a particular media, such as Sculpture 1 and 2. A combination of a level 1 course plus a Topics course in the same media may satisfy this requirement, such as Painting I and Topics: Visual Concepts of Painting. Two art history classes are required (Contemporary Art is strongly recommended.) The remaining courses are selected from the areas of Drawing, Painting, Photography, Printmaking, Sculpture, and Digital Imaging, plus Special Topics courses such as "The Figure: Represented and Revealed." Studio art majors and senior minors are required to participate in the Majors and Minors Review.

During the senior year studio majors are required to take the Studio Concentration Seminar which focuses on the development of an individual body of work. Students are provided with a workspace in Millard Art Center. Studio Art Majors are required to take the fall semester (VAST 300) and are eligible for the spring semester (VAST 301). While both semesters are strongly recommended for the major, students will be admitted to the spring semester based on an evaluation of their work by studio art faculty. Only students taking the spring semester, Studio Concentration Seminar 2, will participate in the senior exhibition in Cantor Art Gallery.

The studio art minor requires a total of six courses including 2D and 3D Fundamentals plus one art history course or the Studio Concentration Seminar, which is open to selected minors. The remaining three elective courses may be chosen from Drawing, Painting, Photography, Sculpture, Printmaking and Digital Imaging, plus Special Topics Courses.

A combined major and minor in either of the Department's two divisions (Art History major/Studio Art minor or Studio Art major/ Art History minor) requires the completion of 16 courses. Ten in the major and six in the minor, following the individual requirements listed for the selected major and selected minor.

Advanced Placement Credit: Students with AP credit in Art History, Studio, and Drawing are awarded placement in the studio art curriculum. AP credit does not count toward the minimum number of courses required for the majors or minors.

## Visual Arts History

## Introductory Courses

Visual Arts History 101 - Introduction to The Visual Arts Fall, spring Fundamental, introductory course in art history and visual culture, which is occasionally team-taught. Emphasis is on the acquisition of basic visual skills and an understanding of the major periods in the history of art. Exposure to works of art through the collections of The Worcester Art Museum is an integral part of the course. One unit.

A cultural history of the major periods of western art since 1300: Renaissance, Baroque, Modern Art. Emphasis is on developments in painting, sculpture and architecture during these periods. Social and historical factors that influenced the art are also given attention. One unit.

Visual Arts History 111 - Survey of the History of Architecture
Alternate years
Unfolds the foundational issues of architecture through a reading of a number of the most important primary sources. Readings reveal issues that architects and theorists through time have found most compelling. One unit.
Visual Arts History 199 - Introductory Topics in Art History
Annually
Offered by all professors, explores special areas or concepts outside the current course offerings, on an introductory level. Recent courses have included a team-taught course on modern art, and a course on the development of body imagery in art history. One unit.

## Criticism and Themes

## Visual Arts History 136 - Narrative in Art and Film

Annually
Introductory course to narrative structures in both film and the visual arts. Students view a wide variety of films: comedy, silent and drama, from foreign as well as American directors. Film theory is included. One unit.

## Intermediate Courses

Most intermediate courses presume Introduction to The Visual Arts or Survey of Art. This requirement may also be fulfilled, pending the discretion of the instructor, by experience acquired by personal study. Intermediate courses are divided into two types of inquiry: Historical Periods and Criticism and Themes.

## Historical Periods

Visual Arts History 204 — Medieval Art
Fall
Deals with art from the beginning of a new European west under Charlemagne, 800 A.D., to the age of the great cathedrals in the 13th century. Architecture, manuscript illumination, stained glass, and sculpture are included. Receives both Arts and Religion Distribution requirements. One unit.

Visual Arts History 205 - Early Renaissance Art
Spring
Examines painting, sculpture and architecture of the 14th and 15 th centuries in Italy in terms of historical and cultural context, for example, the evolution of secular art, the status of the artist, and the rise of humanism. One unit.

## Visual Arts History 207 - Baroque \& Rococo Art

Spring
Studies the diverse styles that emerged in European painting, sculpture and architecture in the 17 th and early 18th centuries. The era begins with the "High" Baroque art of the Counter Reformation, contrasted with the developments of Realism and the revival of Classicism. These styles enter a new phase in the eras of the Rococo and the French Revolution. One unit.

Visual Arts History 209 - 19th-Century Art Fall
Concentrates on the 19th century with emphasis on French developments, Neo-classicism, Romanticism, Realism, Impressionism, and Post Impressionism. Prerequisite: Permission of the instructor. One unit.

Visual Arts History 210 - 20th-Century Art
Spring
Beginning with the development of Expressionism and Abstraction just before World War I, this course traces the development of modern ideas in painting and sculpture up to the present day. Prerequisite: Permission of the instructor. One unit.

Covers painting and sculpture of the 16th century in Italy, especially the developments of the High Renaissance in Florence and Rome and the evolution of Mannerism. Major figures studied include Leonardo da Vinci, Raphael, Michelangelo, Bramante, and Titian. One unit.

## Visual Arts History 233 - Philosophy of Architecture <br> Alternate years

The relationship between architectural forms and the basic character of human dwelling and its implications is the focus of this course. Presents an opportunity to study the philosophy of architecture by studying architecture philosophically. In addition to readings from traditional and contemporary literature, aesthetics and architectural theory, we reflect on these issues by looking at and responding to architectural examples. The goal is to reach a deeper understanding of architecture and of the role it plays in our lives. Cross-listed with Philosophy 187. One unit.

## Visual Arts History 240 - Modern Architecture

Every third semester
Exploration of the major movements and architects of European and American modernism of the 20th century. Strong emphasis on critical reading, class discussion, and preparation of research projects and/or models. One unit.

## Criticism and Themes

Visual Arts History 230, 231 - Architectural Studies 1, 2
Every third year
These courses examine the history of architecture from pre-history to the present. Focus is on major monuments and developments in the history of architectural styles, building technology and urban planning. Both courses question the relationship between social, political and economic history and the internal progress of architecture as a phenomenon independent of historical context. Strong emphasis on critical reading, class discussions and preparation of one major research paper. One unit.
Visual Arts History 234 - Painter in the Modern World Spring
The development of painting as the central medium of visual expression in the $19^{\text {th }}$ and $20^{\text {th }}$ centuries investigated. The painters studied range from Goya to Picasso, and artists will be considered in terms of the development of their careers, their contribution to the art of painting, and their influences on the cultural and social ideas of Western society. Prerequisite: permission of the instructor. One unit.
Visual Arts History 299 - Topics in Art History
Annually
Special topics in art history, architecture and criticism are offered regularly by all professors. Responds to special interests evidenced by students, outgrowths of topics addressed in an intermediate course, or research interests of the faculty. Often interdisciplinary in nature and sometimes offered without prerequisites. Examples of recent Special Topics are: "Landscape, Form \& Meaning," "Art and Contemplative Practice," "Life and Death in 14th-Century Art." One unit.

## Advanced Courses

Visual Arts History 301 - Concentration Seminar Fall
Designed for majors, this course provides a critical examination of issues and methods in the literature of the history of art. Students also complete a capstone project which they begin to develop in their junior year. Prerequisite: permission of the instructor. One unit.
Visual Arts History 420 - Tutorials
Annually
Tutorials relate to all areas covered by Visual Arts History 200 courses. One unit each semester.

## Visual Arts Studio

## Introductory Courses

Visual Arts Studio 101 - 2-D Fundamentals

Fall, spring
An exciting introduction to studio art through an exploration of drawing media. Slide talks, class critiques and discussions, and museum visits insure the beginning student of a solid introduction to the creative process. Taught by the studio staff and a prerequisite for all intermediate courses. One unit.

## Visual Arts Studio 102 - 3-D Fundamentals

Fall, spring
For students who are interested in an introduction to the physical world of sculptural art. Students explore the basic tools, processes and approaches to 3-Dimensional art through wood, clay wire, cloth and found objects. One unit.
Visual Arts Studio 105 - Introductory to Digital Imaging
Fall, spring
A hands-on introduction to digital imaging software on Macintosh computers. Scan, generate and manipulate images and text using Photoshop and QuarkXpress. Think creatively, work digitally and examine the potential of digital imaging as a new form of art. In addition to class projects and critiques in the media lab, students discuss contemporary artists who use the computer in their work. Prerequisite: one previous studio art course. One unit.

## Visual Arts Studio 107 - Life Drawing

Annually
Students work from the model each session. Emphasis is on a structural understanding of the figure and on expressive approach to drawing. Work in a range of media including charcoal, oil stick, acrylic paint and wash. In addition to classwork, work on independent, personal projects in drawing. One unit.

Visual Arts Studio 121 — Drawing 1
Annually
This course continues to build basic drawing skills and fosters the development of an individual drawing style. The content of Drawing I includes drawing from models, drawing in color, and other drawing forms such as collage and sequential drawing. Students are encouraged to explore new content in their work. Course includes readings, sketchbook work, and a visit to an exhibition. Prerequisite: 2D Fundamentals or Life Drawing. One unit.
Visual Arts Studio 199 - Introductory Topics in Studio Art
Annually
Introductory Topics in Studio Art are offered by all professors. These courses explore special techniques or concepts outside the current course offerings. Recent courses have included "Painting and Photography: An Introduction," and "Introduction to Sculpture Projects." One unit.

## Intermediate Courses

Visual Arts Studio 200 - Painting 1
Fall, spring
An introduction to the principles, methods, and materials of oil painting in both historical and contemporary contexts. Emphasis placed on developing an understanding of form and space in pictorial compositions, strengthening perceptual abilities, and increasing knowledge of the use of color as it pertains to painting. Supplemental readings and field trips provide further connection and investigations of the history and process of Painting. Prerequisite: 2D Fundamentals or previous drawing course. One unit.

## Visual Arts Studio 201 — Painting 2

Alternate years
A continuation and expansion of the skills acquired in Painting 1. Students are introduced to a wider range of experimental painting methods using oil based media, and will be working in large as well as small scale formats. The context of painting in contemporary art will be heavily emphasized in this course. Prerequisite: Painting I. One unit.

An exploratory approach to the next level of understanding digital imaging in the fine arts. Learn advanced imaging principles and tool techniques to generate then manipulate images and text using the latest versions of Illustrator, Painter, Photoshop and QuarkXpress. Emphasis on combining computer programs to (hyper) realize your concepts and visions. Prerequisite: Intro to Digital Imaging or permission. One unit.
Visual Arts Studio 210 - Printmaking 1
Alternate years
Printmaking is another form of drawing, with its own range of marks, textures and surfaces. This course introduces relief and intaglio printing. Starts with monotype-drawings on wood, leading to a series of woodcuts, followed by etchings on copper plates. Students encouraged to explore printmaking as expressive medium. This course ends with an exchange of editioned prints between members of the class. Prerequisite: Any drawing course or 2D Fundamentals. One unit.

## Visual Arts Studio 212 - Print and Digital Projects

Alternate years
Contrasts the traditional definition of the print as a drawing medium, with the potential of the computer to edit, recombine, manipulate and print images digitally. Beginning in the printmaking studio with the technique of etching lines on metal plates, students make prints and learn to use the marks and textures of printmaking. The second half of the semester explores how making art has changed conceptually, because images are stored digitally. Students work in the Millard Media Lab using Photoshop to create, manipulate and print images on the computer. Prerequisite: 2D Fundamentals or any drawing course. One unit.

## Visual Arts Studio 213 - Book Projects

Alternate years
Explores the tradition of handmade artists' books and more recent experimental book forms. How do images work together in a sequence? What kind of narrative can be created by blinding images and text into a book form? What are the possible physical forms for the book? In addition to making conventional and experimental books in the print studio, students make a digital book in the Millard Media Lab. Through readings and discussions, this course examines the emergence of the "artists' book" in the 1960's and the work of contemporary artists. Prerequisites: 2D Fundamentals or any drawing course. One unit.

Visual Arts Studio 220 - Sculpture 1
Spring
Sculpture 1 explores the elements of 3-Dimensional expression in projects of varied media. Students are exposed to sculptural issues via slide presentations on past and present works in sculpture. Class critiques allow students to refine both concepts and expression to create a personal synthesis. Prerequisite: 3D Fundamentals. One unit.

## Visual Arts Studio 221 - Sculpture 2

Every third year
Allows the student to continue in-depth work in selected materials of sculptural expression. Students design their own assignments and work independently. Participate in group critiques to discuss finished as well as work in progress. Prerequisite: Sculpture I. One unit.

## Visual Arts Studio 230 - Photography 1

Fall, spring
For students with a serious interest in the creative use of black and white photography. Teaches exposure controls, camera operation, and rudimentary film developing and printing. Continuous work and advancement is achieved through creative photography assignments and criticism. One unit.
Visual Arts Studio 231 — Photography 2
Spring
A more advanced course in the fundamentals of creative photography. Introduces principles of optics, cameras, lighting, films, photographic chemistry, and materials. Visits to museums and galleries in the Boston and Worcester are required. Continuous work and advancement through creative assignments in photographing, processing, printing and criticism. Prerequisite: Photography I. One unit.

Special Topics in Studio Art are offered by all professors. These courses study special techniques or concepts outside the present course offerings, which respond to particular issues in current art. Recent Special Topics courses have included "Installation Art," "Photo Projects," "Digital Imaging in Studio Art" and "The Figure: Represented and Revealed." Prerequisite: 2D or 3D Fundamentals. One unit.

## Advanced Courses

Visual Arts Studio 300 - Studio Concentration Seminar 1
Fall
Focuses on developing a "subject" or idea that can serve as the basis for a concise body of artwork reflecting the studio major's individual viewpoint and distinct aesthetic voice. In creating this body of work, students are challenged to take risks and experience both the discovery and failure that is the basis of the creative process. Each student has an individual space in Millard Art Center for intensive work. Students may work in any combination of media that serves their ideas. Critiques, trips, readings and discussion address the process of developing a body of work as well as issues of professionalism as an artist. Student work is evaluated at the end of fall semester for admission into the Studio Concentration Seminar II. Prerequisite: Permission of the instructor. One unit.
Visual Arts Studio 301 - Studio Concentration Seminar 2
Spring
The second semester of the Studio Concentration Seminar focuses on completing a cohesive body of work for the Senior Exhibition in the Cantor Art Gallery. In addition to producing and selecting work for the exhibition, students develop their artist's statements. Involvement in all aspects of mounting a professional exhibition including presentation of work, publicity, installation of the show and presentation of work to the College community. Prerequisite: Studio Concentration Seminar I and Permission of the instructor. One unit.

Visual Arts Studio 420 - Tutorials
Annually
Tutorials relate to all areas covered by Visual Arts Studio 200 courses. One unit.

## The Campus

Located in central Massachusetts, Holy Cross is nestled on a picturesque hillside within the City of Worcester. The 174 -acre campus has won several national and international awards for excellence in architecture and landscaping. Holy Cross students enjoy some of the most sophisticated, attractive and well maintained facilities in higher education. Campus facilities include 10 residence halls; nine academic buildings; a library; a dining hall; a campus center with coffee bar, pub, ballroom, hair styling shop, dry cleaning service, post office, and a bookstore; a sports complex with a six-lane swimming pool, basketball and hockey arenas, rowing tank, and a fitness center; a play theatre; movie theater; dance studio; art gallery; and a music concert hall.

## Libraries

At Holy Cross, libraries are considered central to the educational mission of the College. Thus, the libraries place great emphasis on instruction with the goal of helping students become information literate during their four years at Holy Cross. The system includes five libraries: the main library, Dinand; the O'Callahan Science Library; the Fenwick Music Library; the Worcester Art Museum Library; and, the Rehm Library of the Center for Religion, Ethics and Culture. The libraries presently house a combined collection of over 650,000 volumes and more than 1,650 professional and scholarly print journals. More than 50 newspapers are received and holdings for the New York Times date back to 1851 on microfilm. The library has access to an additional 11,000 full-text journals in online aggregator databases.

The Holy Cross Libraries offer a vast array of research tools in print and electronic format covering art, music, humanities, social sciences, theology/philosophy, science and economics. Scholarly online databases such as EBSCOhost Academic Premier, Lexis-Nexis, Expanded Academic ASAP, Bibliography of the History of Art, and MLA Modern Language Association, provide researchers with access to peer reviewed references. These and all other library holdings are fully accessible via the Holy Cross Library web catalog. The campus network extends into every faculty office and all residence hall rooms, providing $24 / 7$ access. These databases and collections are also available remotely to the Holy Cross community wherever they may reside.

Reference Services include scheduled, course-specific bibliographic instruction, as well as customary on-demand reference interactions. The Reference Desk in the Dinand Library is staffed Sunday from 2 p.m. to 10 p.m., Monday through Thursday, from 9:30 a.m. to 10 p.m. and Friday, 9 a.m. to $4: 30$ p.m., during the academic year. In an effort to reach out to students and faculty at the point of need, the libraries offer a $24 / 7$ Virtual Reference service (with participating libraries of Jesuit institutions throughout the nation), which can be accessed from the library Web page. The library also hosts an Electronic Reserves program in order to provide students with $24 / 7$ access to reserve materials.

The Holy Cross Libraries are a member of a group of 17 area (academic, private, and public) libraries known as the Academic and Research Collaborative (ARC). This organization publishes a Union List of Serials, sponsors library projects and workshops, operates a twice-daily shuttle service for interlibrary loans and affords its members a collection of more than 3.8 million volumes and more than 23,000 serial subscriptions. The Libraries also participate in the New England Libraries Information Network (NELINET) which provides conferences, workshops and consulting services to participating libraries.

Dinand Library, with a shelving capacity of over 500,000 volumes, has seating for more than 525 readers, and serves as the libraries' central information and processing facility. Dinand is open 112 hours per week. Two wings to Dinand were dedicated in 1978 to the memory of Joshua and Leah Hiatt and all the victims of the Holocaust. A special Holocaust Collection of books and other materials is under constant development and now numbers over 6,000 volumes. Dinand's Main Reading/Reference room contains public PCs that access the library's Web catalog and a wide variety of other informational databases. It also contains major reference works, and facilities for research and study. On the second floor of the Dinand Library are the reserve room, the Scalia electronic classroom, the microform area, video and DVD viewing facilities, the Interlibrary Loan Department, and the library photocopy center. There
are over 100 data ports located throughout the library and stacks area for laptop connectivity. Wireless connectivity is also available in the Main Reading Room and increasingly in other areas of the library.

The College's Archives and Special Collections Department are located on the third floor of Dinand Library. The Archives and Special Collections' facility was redesigned to provide a state-of-theart, climate-controlled and secure environment for the College's collections. Permanent display areas are located throughout the Library where collection material is exhibited. The Archives' reading room has Internet connections for scholars working with laptops.

The Archives Department holds the records of the college including its publications, department files, photographs and early records of the school. The Special Collections include six incunabula (printed prior to 1500), 15th- to 19th-century Jesuitana; Americana (books published in America prior to 1850); John Henry Cardinal Newman letters and first editions; and the collections of James Michael Curley, David I. Walsh, and Louise Imogene Guiney. Of special interest are the recently acquired papers of Edward B. Hanify, Esq. relating to Admiral Husband Kimmel, the U.S. Pacific Fleet Commander at Pearl Harbor in 1941. The Archives also houses the Richard Green ' 49 collection of NASA memorabilia.

The Archives of the New England Province of the Society of Jesus are located in the College Archives. The collection includes records of the Provincial, treasurer, formation director, personnel, and the various apostolates in which New England Jesuits have been engaged. House, community, parish records, foreign mission records, personal papers, and publications are also represented. A large audiovisual collection contains videos, cassettes, films, slides and photographs. In addition, the Archives maintain a collection of books authored by members of the New England Province since its founding.

The O'Callahan Science Library, located in Swords Hall, contains nearly 100,000 volumes of biology, chemistry, computer science, mathematics, neuroscience, and physics, as well as the history, biography, and ethical concerns of science, medicine, and technology. This facility seats 100 , and offers an ever-expanding menu of electronic access to scientific databases and Web sites, and more than 600 subscriptions to the core publications in science. It ranks as one of the strongest special libraries dedicated to the development of future researchers and clinicians among liberal arts colleges in the United States.

The Fenwick Music Library, located in the east end of Fenwick Hall, has a collection of 5,000 compact discs, 6,800 books, 6,800 music scores, 700 videos and 8,000 LPs. A gift of more than 8,000 opera recordings provide added breadth to this collection. The Music Library is equipped with turntable/amplifier units, CD players and cassette decks for both course-related and pleasure listening. VCRs, televisions, DVD, and laser disc players also are available for viewing the library's videos.

Rehm Library, associated with the Center for Religion, Ethics and Culture, is located in Smith Hall, and contains a growing non-circulating collection in support of the Center's mission and programs. Rehm Library provides students with an area for quiet study and reflection.

The Worcester Art Museum Library, located at the museum on Salisbury Street in Worcester, is managed by the Holy Cross Library and houses a collection of 45,000 art volumes that are available to the Holy Cross community. The holdings are fully accessible via the Library's Web site. This collection, as well as the Museum itself, is a rich addition to the resources available to scholars in the field of art history.

Students find in all of these facilities a warm and friendly environment that encourages study, reflections and intellectual growth. A highly competent, friendly and accessible library staff is available and ever willing to provide a vast array of services and assistance to students and faculty.

## Hart Recreation Center

The sports and recreation complex contains a two-level, state-of-the-art fitness center; a 3,600-seat basketball arena; a 1,400-seat ice hockey rink; a six-lane swimming pool with separate diving area; racquetball courts; a rowing practice tank; and locker rooms.

## Hogan Campus Center

The Henry M. Hogan Campus Center offers a wide variety of services and houses numerous facilities providing a broad social, cultural, educational and recreational program for the College community.

The Campus Center includes modern meeting rooms, spacious lounges, a student organization complex, and administrative offices. To serve the College community, the Campus Center houses the Bookstore, Post Office, a coffee lounge and convenience store, cafeteria, and pub. In addition, there are automated teller machines, a hair salon, game room, laundry and dry cleaning services, and a duplicating center and fax service. Within the Campus Center is a multi-purpose ballroom and private dining rooms catered by the College's Dining Services Department.

The Campus Center is committed to fostering educational experiences and to complementing formal instruction with meaningful leisure-time activities. Participation in and the development of mature appreciation for social, cultural, intellectual and recreational activities for the entire College community are the primary goals of the Campus Center.

## Residence Halls

Ten residence halls house the majority of students at the College of the Holy Cross. Five residence halls (Clark, Hanselman, Healy, Lehy and Mulledy) are located on the upper campus on "Easy Street" as is the Henry M. Hogan Campus Center. Wheeler Hall is adjacent to the Dinand Library and Loyola is beside St. Joseph Memorial Chapel. Alumni and Carlin halls offer suite accommodations and are located at opposite ends of the Kimball Quadrangle. Our newest residence hall, an apartment style building for seniors, is located on lower campus between Loyola and Alumni Hall.

## The Chapels

Midway up Mount Saint James is Saint Joseph Memorial Chapel, the spiritual home of the Holy Cross community. Built in 1924 as a memorial to Holy Cross soldiers and sailors who died in World War I, the chapel now includes additional memorials to those killed in World War II, Korea and Vietnam, and the outdoor chapel plaza is highlighted by a memorial plaque to six Jesuit priests and two women associates who were killed in 1989 at the Central American University of El Salvador.

The upper chapel is home to the 11:30 a.m. and $10 \mathrm{p} . \mathrm{m}$. Sunday Masses and the site of numerous weddings of alumni/ae who return to Holy Cross to celebrate the Sacrament of Marriage. In the rear alcoves of the upper chapel are statues of St. Ignatius Loyola, the founder of the Society of Jesus (Jesuits), and the Jesuit missionary St. Francis Xavier. In 1985, the Taylor and Boody tracker organ, designed in the tradition of the 16th century Dutch and northern German organs, was installed, and a series of organ concerts is held during the academic year. The office of Sr. Lucille Cormier, SASV, Wedding Coordinator for the College, is located next to the sacristy at the side entrance of the upper chapel.

The lower level of the chapel served the College as an auditorium and Naval ROTC space before being transformed into a chapel in 1955. Through the generosity of a gift in memory of Robert H. McCooey '52, the lower level was renovated in the summer of 2003 and now features a small chapel for daily Masses and the Interdenominational Sunday Service of Praise and Worship (McCooey Chapel), a midsized chapel seating up to 250 people that is home to the Saturday $4: 30$ p.m. and Sunday 7 p.m. Masses and all holy day liturgies (Mary Chapel), a chapel for the Sacrament of Reconciliation, a chapel for the reservation of the Blessed Sacrament, and a gathering space highlighted by a beautiful baptismal font.

## Fenwick and O’Kane Halls

Attached at right angles, Fenwick and O'Kane, with their soaring spires, housed the entire College in its early years. Today, they contain administrative and faculty offices, classrooms, and the music library. In 1994, music department facilities in Fenwick were totally renovated and were named the John E. Brooks, S.J., Center for Music. At the same time, the original college chapel was converted into the Brooks Concert Hall, which has been acclaimed by performers and acoustical experts as one of the finest medium-sized performance auditoria in the region. The Iris and B. Gerald Cantor Art Gallery, which displays changing exhibits, is located on the first floor of O'Kane Hall.

## Smith Hall

Attached to Fenwick Hall, the Carol and Park B. Smith Hall opened in the summer of 2001. It houses the new Center for Religion, Ethics and Culture, the Rehm Library, as well as the philosophy and religious studies departments, the Center for Interdisciplinary and Special Studies, Information Technology Services, the Admissions Office, a student lounge, and academic support offices such as the registrar's office, class deans, and study abroad. A plaza outside Smith Hall, named Memorial Plaza, commemorates seven Holy Cross alumni who perished in the Sept. 11, 2001 terrorist attacks.

## Haberlin, O'Neil and Swords Halls

Facilities contained in this three-building science complex include laboratories; classrooms and offices for biology, chemistry, mathematics and physics; lounges for faculty and students; the O'Callahan Science Library; and greenhouses and facilities for aquatic research.

## Edith Stein Hall

This five-story building contains 35 classrooms and two large lecture halls for the departments of economics, modern languages and literatures. Additional facilities include the audio visual department; a computer instruction laboratory; and a state-of-the-art Multimedia Resource Center.

## Information Technology Services

Information Technology Services (ITS) provides production and support services for personal computers, information systems, and network access. Support is provided for 12 campus computer labs, wired and wireless network infrastructure, broadband Internet access, e-mail, and a range of software services. Recent major improvements have been made to the College's online academic services, including a state-of-the-art Blackboard Course Management System (CMS), Library System, and Student Academic Record System (STAR). A listing of Web services may be found at http://www.holycross.edu/about/ webserv.htm and the Library catalog at http://library.holycross.edu.

ITS constantly strives for and delivers excellent service to all students, faculty and staff. Students will find a friendly Help Desk staff to assist in accessing the network and online academic resources. Students may purchase Dell computers and related software at the College Bookstore. Support is available for Microsoft Windows and Office applications, Apple OS, e-mail, residence hall networks, Internet connectivity, and information systems. Training courses are offered throughout the year and individual consultations are available anytime. Students provide the support in our residence halls as Residential Computing Consultants (RCCs). Each residence hall has at least one RCC. In addition, ITS hires many work-study students as computer lab supervisors and Help Desk assistants.

For more information, visit www.holycross.edu and navigate through the Administration option to Information Technology Services or call (508) 793-3548.

## Admissions

Holy Cross seeks students who are intellectually curious, appreciative of humanity's creative sense, and committed to the realization of each person's potential. Admission to Holy Cross is highly selective; therefore, the Admissions Committee gives preferential consideration to those candidates who have demonstrated their ability to perform well in a rigorous intellectual endeavor. Although there are no specific secondary-school subject requirements for admission, candidates are urged to complete the most challenging college-preparatory program available in their schools. A curriculum of this nature should emphasize study in English, mathematics, foreign language (ancient or modern), laboratory sciences, and social sciences. Variation from this preparation, however, may not necessarily disqualify a candidate for admission. Evidence of superior achievement in analytical reading and writing is of particular importance to the Admissions Committee.

Beginning with the class entering the College in September 2006, standardized test scores will be an optional part of the admissions process. Students have the option to submit their scores if they believe the results present a fuller picture of their achievements and potential. Students who opt not to submit scores will not be at any disadvantage in admissions decisions. International students whose first language is not English will still be required to submit the Test of English as a Foreign Language (TOEFL).

Since Holy Cross seeks students who will contribute to the College both academically and personally, the Admissions Committee takes specific note of the individual talents and qualities of candidates as well as the extent of extracurricular involvement. Such information is conveyed to the Committee through recommendations from counselors and teachers, through an optional (but recommended) personal interview, and through the candidate's statements on the application.

The College limits the number of students accepted to the biology major and the premedical program. Candidates interested in these academic areas should indicate this preference at the time of submitting an application. Students are first evaluated for admission to the College and then for approval for these programs.

The deadline for filing an application is January 15. Candidates may file the College's institutional application (hard copy or online) or the Common Application. Applicants will be notified of the Committee's decision in early April. Application for admission to Holy Cross is encouraged of all academically qualified candidates regardless of religious affiliation, race, sex, or national origin.
The College of the Holy Cross supports the efforts of secondary school officials and governing bodies to have their schools achieve regional accredited status to provide reliable assurance of the quality of the educational preparation of its applicants for admission.

## Campus Visits

Visitors are always welcome at Holy Cross and will find their time spent on campus to be most productive when the College is in session. Group information sessions are held on several Saturday mornings during the fall. These sessions include a presentation by a member of the Admissions staff, a discussion period, and a student-guided tour of the campus.

Day visits are available to students Monday-Friday while classes are in session. Student visitors are invited to take guided tours of the campus, which are conducted by student volunteers, throughout the fall and spring semesters. Tours begin at the Admissions Office several times throughout the day. Student visitors would also have the opportunity to observe classes and to meet informally with our students and faculty members.

Overnight visits may be arranged for high school seniors. Overnight visits are usually scheduled two weeks in advance and are available Sunday through Wednesday evenings. These visits can also include a tour of the campus, as well as the opportunity to observe classes and to meet informally with our students and faculty members. Student visitors spending the night on campus would be able to enjoy meals in the College's dining hall and spend the night in a residence hall with a current Holy Cross student as
a host. This is an excellent opportunity to experience Holy Cross as our own students do.

## Interviews

Personal interviews in the Admissions Office are scheduled Monday through Friday except during February and March. While not required, they are used in the evaluation of a candidate and, therefore, are highly recommended. We suggest that they be arranged well in advance. To arrange an interview please call the Admissions Office at 1-800-442-2421.

Alumni interviews are available in most metropolitan areas to applicants unable to interview on campus. To facilitate scheduling, please consult the Admissions section on the Holy Cross Web site (www. holycross.edu). The deadline to request an alumni interview is December 15.

## Early Decision

To superior high school seniors who have selected Holy Cross as their first choice, the College offers an Early Decision Program. The Admissions Committee assumes that all students who apply under this program will accept an offer of admission, provided it includes adequate financial aid if such is needed. Students should file an Early Decision application by December 15. Decisions will be made on a rolling basis. Students will be notified of the decision approximately three to four weeks from receipt of all required credentials, including an Early Decision form. Early Decision candidates may file applications for regular admission to other colleges, but upon notification of acceptance to Holy Cross, all other applications must be withdrawn immediately and a validating, non-refundable tuition deposit of $\$ 500$ be submitted.

A personal interview on campus is recommended for all Early Decision candidates and should be arranged well in advance. Should the Admissions Committee be unable to grant acceptance, the application will either be denied or deferred for consideration in the regular pool. The candidate must then have an official transcript of seventh semester grades sent to the College.

## Early Admission

Through its program of Early Admission, the College will consider the application of superior high school juniors who have attained a high degree of personal maturity, fulfilled their graduation requirements and have the full support of their high school. A personal interview is required for students applying for Early Admission.

## Transfer Students

Each semester Holy Cross accepts a limited number of transfer students to the second- and third-year classes. Because of the competition, candidates for transfer must present evidence of strong academic achievement at the college level. The application deadline is November 1 for the spring semester and May 1 for the fall semester. A personal interview is highly recommended for all transfer candidates. Because of departmental limitations, transfer students are admitted to the biology major and the premedical program on a space-available basis.

## Admission of Special Students

A special student is one who is not enrolled as a candidate for a degree. An application form for admission as a special student may be obtained by writing to the Office of the Registrar. The application must be completed prior to August 15 for the fall semester and prior to January 1 for the spring semester. The decision to accept an applicant as a special student will be based on the applicant's reason for seeking special student status, the evidence of a strong record in prior academic work, and favorable recommendations from two professors. Applicants should understand that many courses have limited enrollments and that preference in registration is ordinarily given to degree candidates. Normally, special students
are limited to two courses in a semester.

## First-Year Orientation

A special program of orientation for new students is arranged by various campus offices and organizations prior to the start of classes in the fall. Information concerning the orientation program is forwarded to the students in late spring.

## Further Information

Inquiries concerning admissions should be addressed to:
Admissions Office
College of the Holy Cross
1 College Street
Worcester, MA 01610-2395
(508) 793-2443

1-800-442-2421
www.holycross.edu
E-mail: admissions@holycross.edu

## Expenses

Tuition
\$30,960
Leave of Absence Fee, each semester 30
Room and Board
9,220
Graduation Fee 125
Health Service Fee 260
Transcript 3
Student Activities Fee 214
I.D. Card 10

Application Fee 50
Continuation Fee 500
Health Insurance

Optional Charge

## Acceptance Deposits

Candidates are usually notified of acceptance from January to April and are obliged to forward a nonrefundable reservation deposit of $\$ 500$ by May 1 . The amount deposited is credited toward the first semester bill.

## Room Deposits

All students who wish to reserve a room on campus during the next academic year must signify their intent and pay a non-refundable room deposit of $\$ 100$. This deposit will be credited at the rate of $\$ 50$ per semester toward room charges. First-year students who have paid an acceptance deposit of $\$ 300$ do not have to pay this deposit.

## Books and Personal Expenses

A fair estimate of the average personal and incidental expenses for the school year is $\$ 900$. Books and supplies average about $\$ 700$ for the year.

## Payment of Tuition Bills

Semester bills will be issued in July and December and are due and payable by the date indicated on each statement. Payment is to be made by check or money order, payable to the College of the Holy Cross, and sent to the Bursar, College of the Holy Cross, P.O. Box 3573, Boston, MA 02241-0573. A student Medical Insurance Plan charge is included on the statement and descriptive pamphlets are mailed to each student. A waiver of participation must be forwarded to the Bursar if the insurance is not needed. Upon receipt of the waiver, the premium charge will be removed. The College offers a monthly installment payment plan. Information regarding this plan is sent to current as well as prospective students and is available through the Bursar's Office.

To avoid problems with student registration and a late payment fee, the semester bill is due and payable as specified on the tuition statement. Whenever necessary, the College will cooperate with parents in arranging for any loan plan. However, in those cases when a balance remains on a student's account and mutually agreed upon arrangements have not been made, the following late fee structure will be implemented:

Balances up to $\$ 1,999.99=\$ 50.00$ late fee
Balances of $\$ 2,000-\$ 2,999=\$ 100.00$ late fee
Balances of $\$ 3,000-\$ 3,999=\$ 150.00$ late fee
Balances of $\$ 4,000-\$ 4,999=\$ 200.00$ late fee
Balances of $\$ 5,000$ and higher $=\$ 250.00$ late fee
The policy of the College of the Holy Cross allows for the withholding of transcripts and certifications of academic records from any person whose financial obligations to the College are due and/or unpaid. Delinquent accounts are referred to credit bureaus and a collection agency. If any overdue obligation is referred to an outside agency or to an attorney for collection efforts and/or legal suit, the debt is increased to cover all reasonable costs of collection, including interest, penalties, collection agency fees, courts costs, and attorney fees.

## Refunds of Tuition, Room, and Board

If a student withdraws during the semester, charges will be prorated if the student has been enrolled for less than or equal to 60 percent of the term. The refund formula measures the actual number of days enrolled during the semester. It is determined by dividing the number of days enrolled by the number of days in the semester including weekends and holidays and excluding Thanksgiving break and Spring break. For example, there are 104 eligible calendar days in the 2005 Fall Semester. If a student withdraws on the $50^{\text {th }}$ day in the semester, the student's charges and financial aid will be prorated to reflect that $\mathrm{s} /$ he was enrolled for 48.1 percent of the semester ( 50 divided by 104).

If a student is a recipient of Federal Title IV financial aid, refunds to those programs are required by federal law to be the first priority and must be returned in the following order: Unsubsidized Stafford Loan, Subsidized Stafford Loan, Federal Perkins Loan, Federal Plus Loan, Federal Pell Grant, and Federal SEOG.

A student is not eligible for a refund until all Federal Title IV programs and other scholarships are reimbursed as required and all outstanding balances with the College have been cleared.

After the 60 percent point, there will be no refund of tuition and fees. Room and board fees will be refunded after the 60 percent point only if the removal from campus is due to disciplinary action or medical hardship. Under these circumstances, refunds of room and board will be calculated on a weekly basis. All refunds are subject to assessment of an administrative fee.

The following items are not subject to the refund policy: Visual arts fees, medical insurance, computer installment payment plans, late fees, leave of absence fees, dormitory fines, parking fines, and library fines.

All refunds are calculated and issued from the Office of the Bursar. Federal regulations require that the final tuition statement of all withdrawing students be finalized no later than 30 days after the withdrawal date. Further information concerning the details of this refund policy may be obtained by contacting the Office of the Bursar.

## Credit Balances

If a student's tuition account is at a credit balance after receipt of all financial aid and receipt of all TMS payments, the Bursar Office would be able to return excess funds upon receipt of a written request. A credit balance that is a result of a parent payment or a parent loan, (i.e. MEFA Loan or Plus Loan) will be refunded to the parent, or to the student with written permission from the parent. A credit balance that is a result of a scholarship or grant or a student loan, (i.e. Stafford Loan, Perkins Loan, Signature Loan, TERI Loan, CitiAssist Loan) will be refunded to the student, or the parent with written permission from the student.

## Policy Change

The charges made by the College are subject to change at any time by the formal action of the College administration.

## Financial Aid

The College of the Holy Cross supports a need-based financial aid policy that is representative of its academic and spiritual goals as a Jesuit, undergraduate, liberal arts college.

In 2004-2005, the College administered a total of more than $\$ 28.4$ million in need-based financial assistance to more than 1,618 students.

Financial need is the difference between the cost to attend Holy Cross and the amount, as determined through the financial aid application process, that a family is expected to provide towards the education of the student. Holy Cross uses the more conservative needs-analysis, Institutional Methodology, which is agreed upon by many members of the national College Scholarship Service Assembly, in order to determine eligibility for institutional financial aid. The approach of this analysis is rigorous but fair. However, it typically results in a determination of need for Holy Cross assistance that differs from the Federal Methodology determination of program eligibility used for allocation of federal Title IV funds. Some such federal assistance includes the Federal Stafford Loan Program, Federal Pell Grant, Federal College Work Study, and several other federal Title IV assistance programs. The Financial Aid Committee expects families to provide their share of support to the student from both income and assets. However, the Committee understands that the actual amount of help offered at any income level will vary according to special circumstances, savings, investments, medical bills, and educational costs of other children in undergraduate college. Families should likewise recognize that Holy Cross' financial aid program is aimed at making it financially possible to attend the College, not financially easy.

Financial aid packages are provided in the form of scholarships, loans, and employment, either singly or in combination. Except as otherwise noted, financial assistance is based on demonstrated need, academic promise, and fulfillment of the citizenship requirements for financial aid established by the federal government. A new application and evaluation of need are conducted for each candidate each school year before financial aid packages are renewed. The financial aid program at Holy Cross is generous and therefore all students, regardless of their socio-economic background, who would like to attend the College are encouraged to apply and investigate all means of financial assistance.

## Required Application Materials

## First-Year Students

To be considered for need-based financial assistance at Holy Cross, a student must file both a Free Application for Federal Student Aid (FAFSA) and the College Scholarship Service PROFILE form. The CSS/Financial Aid PROFILE must be completed online at http://www.collegeboard.com. The FAFSA may be filed on-line at http://www.fafsa.ed.gov or a paper version maybe obtained from the high school in the late fall. For priority consideration for Holy Cross assistance, these documents must be submitted to the processing agencies by February 1. Application materials submitted after the priority filing deadline will be considered as time and fund availability allow. In order for our office to receive this information, both the FAFSA and the PROFILE must indicate that the College of the Holy Cross should receive a copy of the analysis report. Students who file only a FAFSA will be considered for only Federal Student Assistance. Additionally, signed copies of both parent and student federal income tax forms including all schedules and W-2 forms for the immediately preceding tax year should be sent directly to the College's Financial Aid Office on or around February $15^{\text {th }}$ in order to ensure correct income information is used to determine financial need. If these tax documents will not be available until a later date, they should be sent to the Financial Aid Office as soon as they are available. Alternate documentation is required in instances where a tax form is not filed by either party.

Financial statements are required of both parents in cases where there is a separation or divorce. The non-custodial parent is required to submit a Noncustodial Parent's Statement. A Business/Farm Supplement is required in cases where the family operates or derives income from a business, corporation, or farm. These are special forms and they are sent directly by the College Scholarship Service (CSS) to families who have filed the PROFILE Registration and indicated that these forms may be appropriate. Additional copies are available from the Financial Aid Office. Both the Noncustodial Parent's Statement and the Business/Farm Supplement should be submitted directly to the Holy Cross Financial Aid Office, not to CSS, by February 1st.

## Upperclass and Renewal Awards

Holy Cross students must submit new application materials for each year that they wish to be considered for need-based, College-administered assistance. A renewal information packet will be mailed in January to each family that has received aid in the past year. Required application materials include the FAFSA and PROFILE (necessary if the student wishes to be considered for Holy Cross scholarship assistance), as well as signed copies of parent and student federal income tax forms including all schedules and W-2 forms for the immediately preceding tax year. Additionally, the Noncustodial Parent's Statement and/or the Business/Farm Supplement may be required. The priority filing deadline for Upperclass and Renewal financial aid application materials is April 15. New awards to upper-class students are based on demonstrated need for assistance as determined by the College as well as the availability of funds. It is the responsibility of the student financial aid applicant to ensure that all the necessary documents are in the hands of the Financial Aid Committee in time for processing of awards. Notifications of renewal are usually mailed the last week in June, and notifications of awards in the case of a new request are made by August 15.

## Scholarships

Each year, more than 350 first-year students are awarded Holy Cross Scholarships with stipends ranging from $\$ 500$ to more than $\$ 31,400$, depending on financial need. There are also a limited number of Holy Cross Merit-Based Scholarships available to students, however, eligibility for these awards is determined by the Admissions Committee based on superior achievement in secondary school. Each student applicant is considered for all awards for which he or she may be eligible, including many endowed and restricted scholarships. In general, scholarship assistance will be renewed each year provided the student continues to demonstrate need for such assistance. However, need-based awards will be adjusted in accordance with college renewal policy for upper-class students or if a family's resources and financial strength change significantly.

Many students will receive scholarship assistance from corporations, foundations, civic groups, parent and school associations, and service clubs, in addition to awards made from College funds. Every student who is interested in financial help should be alert for information about any outside scholarship aid for which independent applications must be submitted.

The Financial Aid Committee at Holy Cross expects students who are residents of Connecticut, Maine, Massachusetts, New Hampshire, Pennsylvania, Rhode Island or Vermont to apply to the scholarship program in their home state. Application information is available either in high school guidance offices or the appropriate state agency listed below. Each state scholarship program has its own deadline for applications; it is advisable to determine the application deadline and to make application early in the academic year.

## Connecticut

Capitol Scholarship Program
Department of Higher Education
61 Woodland St.
Hartford, CT 06105-2326
www.ctdhe.org

## Maine

Finance Authority of Maine
5 Community Drive
P.O. Box 949

Augusta, ME 04332-0949
www.famemaine.com

## Massachusetts

Commonwealth of Massachusetts Office of Student Financial Assistance
330 Stuart St.
Suite 304
Boston, MA 02116-5292
www.massosfa.org

## New Hampshire

State of New Hampshire Post Secondary Education Commission
2 Industrial Park Dr.
Concord, NH 03301-8512
www.nhheaf.org

## Pennsylvania

Higher Education Assistance Agency

1200 North Seventh St.
Harrisburg, PA 17102-1444
www.pheaa.org

## Rhode Island

Rhode Island Higher Education Assistance Authority
Scholarships and Grants Division
560 Jefferson Blvd.
Warwick, RI 02886
www.riheaa.org

## Vermont

Vermont Student Assistance Corporation
Champlain Mill
P. O. Box 2000

Winooski, VT 05404
www.vsac.org

## Grants

## Pell Grants

The Federal Pell Grant Program provides grants directly from the Federal Government in amounts ranging from $\$ 400$ to $\$ 4,050$ for the 2005-2006 academic year. Students may or may not be eligible for this program, depending upon eligibility criteria as well as family financial circumstances. This is the largest federal student assistance program, and all financial aid applicants are required to process a federal Pell Grant application (FAFSA) as a requirement of applying for other assistance at Holy Cross.

## Federal Supplemental Educational Opportunity Grant (SEOG)

This is a limited federal grant program for students of exceptional financial need who without the grant would be unable to continue their education. Students who are eligible for Pell Grants will receive priority consideration for this program. The Financial Aid Director is responsible for selecting eligible students in this program as well as determining the amount of the SEOG award.

## Loans

## The Federal Stafford Student Loan Program

The Federal Stafford Loan Program the primary source of educational loans and eligible students may borrow directly from lenders to finance educational expenses. The interest on this loan may be subsidized or unsubsidized. Each borrower must file a FAFSA in order to receive a determination of his or her eligibility for the interest subsidy. At Holy Cross, student borrowers will have their applications processed electronically by the Financial Aid Office unless he or she directly informs the office that they wish to apply to a lender of their own choice. The maximum amount of loan under this program is $\$ 2,625$ the first year, $\$ 3,500$ for the second, and $\$ 5,500$ for students who have completed two years of study for a five-year undergraduate total of $\$ 23,000$. For students in repayment, the interest rate is based on the 91 -day Treasury bill rate plus 2.3 percent, not to exceed 8.25 percent. Repayment begins six months after graduation from college, graduate school or termination of studies and may extend beyond 10 years. Typical repayment in the Stafford Program would be $\$ 123$ per month for 120 months
on a loan of $\$ 10,000$ at 8.25 percent. Deferment of repayment for up to three years for military service, Peace Corps or VISTA is permitted. Up to one year of deferment may be allowed while actively seeking but not finding full-time employment.

## Federal Perkins Loan

Holy Cross administers a limited number of loans under the authority of this Federal program. All Perkins Loans are subsidized while the student borrower is enrolled at least half-time. These loans carry an interest rate of 5 percent simple interest for loans in repayment. Repayment and deferment provisions are similar to the Federal Stafford Program, which is described above. A student may borrow up to $\$ 16,000$ over four years at Holy Cross in the Federal Perkins Loan program. Up to 10 years may be allowed to repay a Perkins Loan, and a typical repayment obligation where a student has borrowed $\$ 6,000$ would be $\$ 64$ per month for 120 months at 5 percent.

Because of the limited amount of funds in the Perkins Loan program, priority for loans from this source of assistance will be extended to students who are determined by the College to be most in need of this loan.

## Federal Parent Loans for Undergraduate Students (PLUS)

PLUS is a federal loan program through which parent borrowers may borrow up to the total cost of education minus other financial aid offered to the student. The rate of interest is variable based on the 52-week Treasury Bill plus 3.1 percent, although not to exceed 9 percent. The interest rate for 2004-2005 was 3.22 percent, and will be reset for the 2005-2006 academic year on July 1. Repayment of PLUS loans usually begins within 60 days after note signing and extends up to 10 years.

At Holy Cross, the preferred lender for Federal PLUS loans is the Massachusetts Educational Financing Authority (MEFA). Additional information regarding this loan is available at www.mefa.org.

## The Massachusetts Educational Financing Authority Loan at Holy Cross (MEFA)

Holy Cross provides two additional ways for parents to finance their children's education. The MEFA Loan, administered in conjunction with the Massachusetts Educational Financing Authority (MEFA), allows eligible parents to choose either:

1. a one-year loan program under which they may borrow up to 100 percent of the total education expenses for one academic year minus other financial aid, or
2. a Tuition Prepayment Plan under which tuition for the student's remaining college years may be borrowed all at once. Under this plan the amount borrowed is based on the current year's tuition, which is guaranteed to remain the same for the student regardless of future increases.

Both options may carry with them after-tax savings, with the possibility of tax deductible interest payments on a secured loan.

The MEFA Loan was developed by the Massachusetts Educational Financing Authority in cooperation with a group of colleges and universities, including Holy Cross, to ease the burden of continually rising costs for tuition, room and board and other charges. The plan, which has no application fee, is funded by the sale of tax-exempt bonds and provides:

1. uniform terms, borrowing rates and standards of eligibility and credit for parents and students;
2. a fixed interest with level monthly payments, or a variable interest rate tied to the interest rate earned by purchasers of the bonds;
3. a centralized loan service to handle approval of credit, payment collection and record-keeping; and
4. no prepayment penalty for early retirement of this loan.

With MEFA, parents can spread repayment over a 15 year period at a guaranteed fixed or variable interest rate, which is determined based on the interest rate for each bond issue. The fixed interest rate
offered for 2005-2006 is 6.19 percent ( 6.78 percent APR) for the life of the loan while the variable rate has been set at 4.99 percent ( 5.57 percent APR) for 2005 . The variable rate will be reset annually on April 1. Monthly payments for the fixed rate loan in 2005-2006 will be about $\$ 8.99$ per $\$ 1,000$ borrowed and $\$ 7.44$ per $\$ 1,000$ in the variable rate option.

Interested families should contact the Financial Aid Office or visit MEFA's Web site at www.mefa.org for instructions and applications for this program.

## Employment

As part of their financial aid package, some students may be awarded a work-study authorization. The Federal College Work-Study Program (FCWSP) provides funds for Holy Cross to subsidize hourly wages of students who demonstrate need for assistance in meeting their educational expenses. Eligible students who are tendered employment have the opportunity to earn up to $\$ 1,600$ during the first academic year. First-year students should not count on earning any substantial sum through employment on campus if their financial aid award does not contain an authorization for FCWSP or if the number of eligible students restricts placements of all students who are eligible for work study.

Wages are based on an hourly rate and are paid directly to the student each week. There are miscellaneous jobs in the Worcester community, and interested students should contact Human Resources for additional information regarding such opportunities.

## ROTC Scholarships and Stipends

The Navy ROTC program offers full and partial tuition scholarships to selected cadets and midshipmen. A full four-year NROTC scholarship student attending Holy Cross receives a tax-free stipend of $\$ 150$ per month as well as a Holy Cross NROTC Scholarship Incentive Grant, which is equal to standard room charges each year. The NROTC Incentive Grant is applicable toward only on-campus room charges. Additional information can be obtained by contacting the Naval ROTC office on campus.

Army and Air Force ROTC are offered at Worcester Polytechnic Institute and, through the Worcester Consortium, Holy Cross students may enroll in one of those programs. Students receiving full, four-year AROTC and AFROTC Scholarships are also eligible to receive the Holy Cross ROTC Incentive Grant, which is equal to standard room charges each year. As with the NROTC Incentive Grant, AROTC and AFROTC Incentive Grants are only applicable toward on-campus room charges. Additional information regarding these programs is available by contacting the Professor of Military Science or Professor of Aerospace Studies, Worcester Polytechnic Institute, Worcester, MA 01609.

## Additional Information

Answers to questions not found here or to other specific inquiries regarding the financial aid program will be provided by the Financial Aid Staff. Please address correspondence to:

Financial Aid Office
College of the Holy Cross
1 College Street
Worcester, MA 01610-2395
Phone (508) 793-2265
Fax (508) 793-2527
Email: financialaid@holycross.edu.

## Holy Cross Scholarships

## General

The financial aid program at Holy Cross has been established to assist students who would otherwise not be able to attend the College due to financial restrictions. In addition to the endowed scholarships and restricted awards listed below, the College sets aside substantial funds from its annual operating income to assist worthy candidates in meeting their educational expenses. With the exception of merit scholarships, all students who apply for need based Holy Cross scholarship assistance will be considered for all endowed scholarships whose criteria they meet.

## Endowed Scholarships

Martha and Peter Adams Scholarship: Established in 1984 by a gift from George S. and Peter E. Adams, Jr. in memory of their parents, Martha and Peter Adams. Income to be awarded to a worthy and needy student.
The George I. Alden Scholarship: Established in November 1993 by a grant from the George I. Alden Trust. Income restricted to financial aid for students in the physical sciences.
The Governor Ames Scholarship: Established in 1887 by Governor Oliver Ames.
The Benjamin and Catherine M. Andrews Scholarship Fund: Established in September 1984 by a bequest from the estate of Catherine M. Andrews. To be used for scholarships for a worthy student or students.
Anonymous: Established in February 1966 by an anonymous donor. Income to be used for scholarships to be awarded at the discretion of the President of the College.
Julia Maria Baker Scholarship: Established in 1944 by a bequest of Philip Hope Baker in memory of his mother, to provide scholarships for adopted children.
John J. Barry Scholarship Fund: Established in 1963 by a gift of Margaret Barry in memory of her husband John J. Barry '10. Preference will be given to a needy, deserving applicant with an interest in baseball.
The James E. Batchelder Scholarship: Established in March 1989 by a bequest from James E. Batchelder '62. Income for graduates of St. John's Preparatory School in Danvers, Mass.
The Eugene A. Bickford Scholarship: Established in October 1932, from the estate of Mrs. Mary A. Magenis of Brookline, Mass., in memory of her brother, the late Eugene A. Bickford '96. The annual income to provide for the education of a deserving student under such conditions and regulations as imposed by the faculty of the College.
The Elizabeth L. Billington and Catherine Conlon Memorial Fund: Established in May 1972 by a bequest from the estate of Elizabeth L. Billington to grant scholarship assistance to deserving students attending Holy Cross College in such amounts and in such times as the Trustees in their discretion shall deem advisable.
Edward J. Brennan, Jr. Memorial Merit Scholarship: Established in 2001 in memory of Edward J. Brennan, Jr. to aid worthy students who are talented, ambitious and hard-working from Berkshire County, Massachusetts; Franklin County, Massachusetts; Hampshire County, Massachusetts or Hampden County, Massachusetts.
The James F. and Margaret A. Bresnahan Scholarship Fund: Established in November 1965 in memory of James F. and Margaret A. Bresnahan to aid worthy students from the Diocese of Springfield, Mass. Scholarship aid is to be awarded at the discretion of the President of the College from income only.

The Anne M. Brogan Scholarship: Established in 1981 by John P. Brogan '66 in honor of his mother.
The Rev. John E. Brooks, S.J., Music Scholarship: Established in 1994 in honor of Father Brooks '49 to provide scholarships for music department students.
The Rev. John E. Brooks, S.J., Scholarship: Established in 1980 by Michael W. McCarthy, a 1960 Honorary Degree recipient, in honor of Father Brooks.
The John E. and Mildred E. Brooks Scholarship: Established in November 1990 by Trustees to honor the memory of Father Brooks' parents.
The Raymond I. Bruttomesso '56 Scholarship: Established through a gift from Raymond I. Bruttomesso '56. Income to be used for deserving students, with first priority for students from Torrington, Conn., second priority to students from Litchfield County, Conn., and third priority to students from the State of Connecticut.

The Francis K. Buckley Scholarship: Established through a gift from Francis K. Buckley '35.
The Rev. Charles E. Burke Scholarship: Established in 1895. Appointment to be made from residents of St. Francis Parish, North Adams, Mass.
The James M. Burke Scholarship: Established on April 1, 1950 from the estate of William H. Burke. The beneficiary is to be selected by the Trustees of the College.
Captain John J. Burke Scholarship Fund: Founded and augmented by gifts in memory of Captain John J. Burke, USMC '65. Income to be awarded to a student in the NROTC Program.
The Margaret R. Burke Scholarship: Established in 1979 by Edmund J. Burke '24 in memory of his mother, to provide financial assistance to needy sons or daughters of widowed mothers.
The Dr. and Mrs. Harry P. Cahill Scholarship: Established in June 1963, from a Trust Fund established by Dr. Harry P. Cahill and the estate of his wife, Anne R. Cahill. Income to be used to aid students who lack sufficient financial means for their education. Selection is to be made by College authorities.
The John F. Cairns '36 and Mary M. Cairns Scholarship: Established in 2003 by a bequest from the estate of John F. Cairns '36.
The Robert J. Cairns Memorial Fund: Established on Sept. 24, 1953 by bequest from the estate of Alfred F. Finneran for scholarship aid to worthy students.
The Louis Calder Foundation Scholarship: Established in 1993 by a challenge grant from the Louis Calder Foundation to provide a permanent non-athletic scholarship fund for qualified students from the City of New York.
The Thomas Callaghan Scholarship: Established in 1914 by the late Thomas Callaghan of Leicester, Mass., limited to residents of Worcester County, preference to be given to those preparing for the priesthood.
Bridget Carney Scholarship Fund: Established in 1972 by Dr. James I. Kearney in memory of his mother, Bridget Carney. The income from the fund is to provide aid to worthy and deserving students whose parents were parishioners of St. Ignatius Roman Catholic Church, Kingston, Pa.
The Honorable James Bernard Carroll Scholarship: Established in 1939 by Mrs. James Bernard Carroll as a memorial to her husband, the late Justice Bernard Carroll, of the Class of 1878. Restricted to graduates of St. Michael's Cathedral High School, Springfield, Mass. Selection to be made by the President of Holy Cross College and the Reverend Rector of St. Michael's Cathedral, Springfield, on candidate's character, scholarship and extracurricular achievements.
The Catherine McPherson Carson Scholarship Fund: Established in 1962 by Dr. Alexander F. Carson '19, for the purpose of furnishing scholarships to qualified students selected by the President of the College.
Challenger Memorial Scholarship: Established in 1986 by Jacob Hiatt, D.H. '73, in memory of the crew of the space shuttle Challenger.

John P. Chiota, Jr. Scholarship Fund: Established by his wife and family in memory of John P. Chiota, Jr. '31. Income to be awarded to worthy and needy students with preference given to graduates of Fairfield Preparatory School.
Class of 1951: Gifts of members of the Class of 1951 to the Development Fund to be used to establish a scholarship. Started in honor of the Class of 51's 50th Reunion.
Class of 1963: Gifts of members of the Class of 1963 to the Development Fund to be used to establish a scholarship.
Class of 1964: Gifts of members of the Class of 1964 to the Development Fund to be used to establish a scholarship.
William L. and Hazel B. Clifford Scholarship: Established in 1966.
The Frank D. Comerford Scholarship Fund: Established by Archibald R. Graustein in 1959.
The Charles F. and Dorothy T. Conlon Scholarship: Established in 1997 from the estate of Dorothy T. Conlon.

The Connecticut Valley Alumni Scholarship: Established in 1912 by the Alumni of Connecticut Valley.
The Maurice Connor Memorial Scholarship: Established in 1929 by Mr. John T. Connor in memory of his brother, Maurice. The intention of the donor is to provide for one student; board, room, tuition and fee charges, as far as the income will provide them. The single beneficiary is to be chosen by the pastor of St. Mary's Church, Westfield, Mass.
The Monsignor George S.L. Connor Scholarship: Established on Oct. 18, 1955, by gift of the late Msgr. George S.L. Connor ' 07 . Selection to be made by the President of the College who shall give first preference to a worthy applicant who is a member of Holy Name Parish in Springfield, Mass. If no such eligible candidate applies, then such a candidate who graduates from Cathedral High School shall be considered; if none such, then any application from the Springfield high schools. Candidates must pass a scholarship test and give evidence of good character and leadership qualities.
The Rev. Edward T. Connors Memorial Scholarship: Established in 1986 by friends and family in memory of Rev. Edward T. Connors ' 27 with preference for students interested in the priesthood, public service or military service.
Michael Coogan Scholarship Fund: Established in 1969 by a bequest from the estate of Adeline V. Callahan to educate a student or students who are residents of Millbury, Mass., and who intend to enter the priesthood.

Thomas and Mary A. Corrigan Scholarship: Established in 1972 by a bequest of Henry J.C. Corrigan.
The Thomas Costello and Anna Costello Scholarship: Established on Dec. 9, 1947, by bequest of Susan A. Costello in memory of her parents and by a bequest from the estate of Fanny Goodwin Hobbs. Income to be used to aid a student who lacks sufficient financial means for his education and who has expressed the intention of entering the priesthood.
The James J. Courtney '70 Family Scholarship: Established in 1998 by Mary Jo and Langan Courtney in memory of James, Paul, Jimmy and Jenny Anne Courtney. Preference in awarding the scholarship shall be for students who have lost a parent or who have been separated from both birth parents and raised in an adoptive home.

The Crowley Family Memorial Scholarships: Established on July 2, 1947, by bequest of Miss Bridget T. Crowley of Springfield, Mass. Beneficiary to be selected by competitive examination and is open to students of the parochial and public high schools of Springfield, Mass., who are morally, mentally and physically worthy and competent and who show promise of ability, but who have such limited financial means that, if not aided by a scholarship, they would be unable to attend college.

The Crusader Council Knights of Columbus Scholarship: Established in June 1963, by a gift toward a scholarship in honor of Rev. Joseph F. Busam, S.J., and in gratitude for his many years of service as Chaplain of Crusader Council, No. 2706, this scholarship was extended with another gift on the $75^{\text {th }}$ Anniversary of the Council in 2004 to acknowledge the service of other Jesuits (Edmund K. Cheney, Charles B. Connolly, Patrick J. Cummings, Charles J. Dunn, Robert F. Healey, Vincent A. Lapomarda, William J. O'Halloran, and John D. Wheeler) to the same Council.
The George D. and Katherine L. Curry Scholarship: Established in 1993 to furnish scholarship and other financial aid to needy and deserving students in memory of Mr. and Mrs. George D. Curry.
The Right Rev. Monsignor Daniel F. Curtin Scholarship: Established in 1921 by the Rt. Rev. Monsignor Daniel F. Curtin, Glens Falls, N.Y., to be appointed by the pastor of St. Mary's Church, Glens Falls, N.Y.
Charles A. Dana Scholarship: Established in 1982 by a challenge grant from the Charles A. Dana Foundation. Income to be used for students of sound academic ability who have the potential for or have demonstrated desired qualities of character and leadership. Dana Scholars receive stipends based upon financial need ranging from an honorarium up to the amount of tuition.
The Robert F. and Darryln P. Danahy Scholarship: Established by a gift from Darryln P. and Robert F. Danahy '55. Income to be awarded to needy students designated by the College.

The John David Dawson Fund in honor of Dr. Roger Paul Dawson '07: Established in 2001 by the Trust Estate of John David Dawson. Income is to be used to provide scholarship aid to needy pre-medical students.
The Martha H., Anthony P., and Mary Ann DeBaggis Scholarship: Established by a bequest from the estate of Henry F. DeBaggis '37. Preference will be given to students from inner city high schools or from Catholic high schools who are ranked at the top of their high school class and who have demonstrated significant financial need.
Dr. and Mrs. Carl J. DePrizio Scholarship: Established on Oct. 30, 1959. Income to be used for an award to a deserving student in sciences.
The Kenneth R. Desmarais Memorial Scholarship: Established in 1989 by family, classmates and friends to honor Kenneth R. Desmarais '61. Income to be used for a student athlete who has demonstrated leadership qualities.
The Daniel T. Devine Scholarship: Established in October 1945, from the estate of Mary F. Devine in memory of her brother, Rev. Daniel T. Devine. To be awarded as a result of competitive examination to the member of the graduating class of St. Mary 's Parochial School, Milford, Mass., who has attended said high school for four years and who has been a member of St. Mary's Parish through his high school course.
Diocese of Worcester Scholarship: Established by the Most Rev. Bernard J. Flanagan, D.D., '28, Bishop of Worcester, the income of which is to be utilized for increased student aid.
Daniel F. Doherty Scholarship Fund: Established in 1969 by a bequest from the late Alice Dillon Doherty, in memory of her husband, Daniel F. Doherty (LL.D. '26). Income to be used for aiding needy students who are residents of Westfield, Mass.
The Monsignor Joseph P. Donelan Scholarship Fund: Established in 1996 in memory of Msgr. Joseph P. Donelan ' 34 by his nephew, Joseph P. Donelan II ' 72 . Preference will be given to students from singleparent homes, students of immigrant parents or students of parents who are educators.
The James F. Donnelly '99 Scholarship: Established on May 11, 1956, by a gift from the Sylvan Oestreicher Foundation.
James P. Doran and Loretta K. Doran Fund: Established in 1985 by a bequest from the estate of Loretta K. Doran. The Fund is to be used in aiding and assisting needy students.

Michael J. \& Joanna F. Daley Driscoll Scholarship Fund: Established in 1986 by a bequest from the estate of Rev. Frederick G.M. Driscoll '19, in memory of his parents.
The Bertha and Bill Dubois Memorial Scholarship: Established in 2003 by Earl W. DuBois ' 48 to provide scholarship assistance to students based upon their financial needs with preference to students majoring in physics.
The Charles Leo Dubois Scholarship Fund: Established in 1980 by a bequest from the estate of Charles L. Dubois '34, in memory of his parents, Charles Leon Dubois and Mary Ellen Dubois. The annual income is to be used to aid some worthy student or students, preferably fourth-year students, in continuing or completing their college work.
The Rev. Stephen Duffy, S.J., Scholarship: Established in 1989 to provide full tuition scholarship annually to a fourth-year student graduating from Regis High School.
The Richard E. Duhaime Scholarship: Established in 1987 by a bequest from Richard E. Duhaime ' 47.
Earls Family Scholarship: Established by William T. Earls to provide scholarships for worthy young students with preference to students from the Cincinnati, OH area as determined by the College.
Kevin M. Earls Scholarship Fund: Established in 1986 by friends in memory of Kevin M. Earls '43.
The Eastman Kodak Company Scholarship: Established on Sept. 16, 1960.
The James F. and Mary C. Egan Scholarship: Established in 1987 to honor James Francis Egan '21 and Mary Collins Egan. Income available for a worthy candidate, with a preference for a Western Massachusetts or Southeastern Connecticut student.
The Theodore T. and Mary G. Ellis Scholarship Fund: Established in 1941 by the estate and through the generosity of the late Theodore T. and Mary G. Ellis. From the income of this fund, several scholarship awards of full or partial tuition are annually granted to residents of Worcester.
The William F. and Barbara C. Emswiler Scholarship: Established in 1994 by friends and family of William F. and Barbara C. Emswiler.
The Raymond P. Farland Scholarship Fund: Established in 1999 by the Raymond P. Farland Trust.
The Fennelly Family Scholarship: Established in 2004 by Katherine and Vincent M. Fennelly ' 42 to provide scholarship assistance to students based upon their financial needs assessment.
The Rev. Bernard A. Fiekers, S.J., Memorial Fund: Established in 1973 and augmented by gifts and bequests. Income to be used for scholarship awards to needy students majoring in chemistry.
The Rev. Patrick J. Finnegan, P.R., Scholarship: Established on Nov. 28, 1955, by a bequest from the estate of Rev. Patrick J. Finnegan. Income to be used to assist needy students from Portsmouth, N.H.
William Fitman Scholarship: Established in 1983 by a bequest from Anna G. Fitman in memory of William J. Fitman. Income is to be used for a student whose domicile is in the State of Massachusetts.

William and Mary Fitman Scholarship: Established in 1983 by a bequest from Anna G. Fitman in memory of William and Mary Fitman. Income for a student whose domicile is in the State of Massachusetts.
The Rev. William FitzGerald, S.J. Merit Scholarship: Established in 2000 by the John and Michele Rugo Family Trust in honor of Rev. William FitzGerald, S.J. to provide scholarships to demonstrably talented, ambitious and hardworking students. At the donor's request preference in awarding the scholarship will be given to students majoring in Classics.
Rev. Bernard J. Flanagan D.D.: Established in 1962 by the Diocese of Worcester in honor of the Bishop of Worcester, Rev. Bernard Flanagan.
Charles J. Fleming Scholarship: Established in 1982 by a bequest from Charles J. Fleming '18 for scholarships to needy students with track and field ability and with good scholastic records.
The John K. Flynn Scholarship: Established in 1994 from the estate of Anne F. Jolles in memory of her brother John K. Flynn.

The Rev. John J. Foran, D.D., Memorial Scholarship: Established in 1962 by the Rev. William A. Foran to provide scholarships for graduates of Catholic secondary schools in the present diocese of Worcester and Springfield.
The Francis T. Fox Scholarship Fund: Established in 1976 by the Foundation for Educational Services to assist students preparing for a career in public administration.
The Desiree L. Franklin Scholarship Endowment Fund: Established in April 1977 from the estate of Desiree L. Franklin to assist any young man or woman who may be in financial need. Scholarship aid is to be awarded at the discretion of the President from income only.
The Mary Gammal Scholarship: Established in 1981 by Mary Gammal to provide income to students who are suffering from a complete loss of hearing, or are profoundly hearing impaired. First preference to students from Worcester, then to those from Massachusetts.
Frank Garvey '35 Scholarship Fund: Established in 2000 by Mrs. Jane Garvey to provide scholarship assistance to students based upon financial needs assessment. Preference given to students from Suffolk County, New York.
General Motors College Plan Scholarship: A four-year scholarship offered semi-annually by General Motors Corporation. The amount of the award varies with the financial need of the recipient as determined by the General Motors Scholarship Committee.
The E. Burke Giblin Scholarship: Founded and augmented by gifts in memory of E. Burke Giblin, a Trustee of Holy Cross from 1973 to 1980. Mr. Giblin was chairman of the Warner-Lambert Company.
John P. Glowik Jr., Basketball Scholarships: Established in 1997 by John P. Glowik '73. To be used for scholarships for one member of the varsity men's basketball team and one member of the varsity women's basketball team.
The In Memory of David Goggin Scholarship: Established in 1925 by Mrs. Catherine M. Goggin, in memory of David Goggin. Preference to be given to a relative.
The John J. Gonynor '49 Scholarship: Established in 2000 by a bequest from the estate of Ruth P. Gonynor in memory of her brother to provide scholarship assistance to College of the Holy Cross students based upon financial need.
The Richard T. Gralton Scholarship: Established in 1986 by a bequest from Richard T. Gralton. Augmented by gifts from friends and family of Richard T. Gralton '54.
The Monsignor Griffin Scholarship: Established in 1895, limited to residents of St. John’s Parish, Worcester, Mass.
The Thomas F. Grogan Scholarship: A memorial to the deceased father of Dr. Richard H. Grogan '35 and his brother, Fr. Thomas Grogan, S.J.
The Dale T. Gutekunst Scholarship: Established in 1981 by Mrs. Eugenia S. Gutekunst in memory of her son, Dale Thomas Gutekunst, of the Class of 1970.
The Mary Agnes Haberlin Foundation: For worthy students chosen by the President or faculty of the College.
The Joseph T. Hackett Memorial Scholarship: Established by a bequest from the estate of Malachi C. Hackett. Income to be awarded to worthy and needy students with preference given to residents of Meriden, Conn.
The Halleron Family Scholarship: Established in 2000 by John J. Halleron III ' 60 in memory of John J. Halleron Jr. '27 to provide financial aid to qualified students.

The John H. Halloran Scholarship I: Established in 1909 by Mr. John H. Halloran of New York, as a memorial to his brother, the late William J. Halloran of Worcester. Competition open to the country.

The John H. Halloran Scholarship II: Established in 1921 by Mr. John H. Halloran of New York as a memorial to his brother, the late William J. Halloran of Worcester, Mass. Selection to be made from students of the public and parochial schools of Northampton, Mass., by means of competitive examinations.
The Rev. Thomas Stephen Hanrahan Scholarship: Established in January 1963, by a bequest from the estate of Margaret Ellen Kearney as a memorial to the Rev. Thomas Stephen Hanrahan. Income to be used to aid a worthy student.
Rev. Francis J. Hart Memorial Scholarship Fund: Established by the Class of 1943 as a tribute to Rev. Francis J. Hart, S.J.
The Rev. Jeremiah J. Healy Scholarship I: Established in 1912 by the Rev. Jeremiah J. Healy, of Gloucester, Mass., for a candidate for the priesthood worthy of financial aid.
The Rev. Jeremiah J. Healy Scholarship II: Same as the Rev. Jeremiah J. Healy Scholarship I.
The Richard Healy Scholarship: Established in 1908 by Mr. Richard Healy of Worcester, Mass., open to competition for residents of Worcester County regardless of creed.
The Mr. and Mrs. Richard Healy Scholarship: Established in 1916 by Mr. and Mrs. Richard Healy of Worcester, Mass., for the benefit of a direct relative of donors in need of financial assistance.
The Rev. Frederick W. Heaney, S.J., Scholarship: Established in 1920 by Miss Lillian Heaney, in memory of her brother, the Rev. Frederick W. Heaney, S.J.
William R. Hearst Foundation Scholarship: Established in 1998 by a grant from The Hearst Foundation to support financially needy students from the Greater Boston and Worcester areas who intend to reside in the United States after completing their studies.
The Cornelius Heeney Memorial Scholarship: Established in 1990 by the Brooklyn Benevolent Society, to be awarded to a student of New York City, preferably Brooklyn, for a needy student who meets the College's academic qualifications.
The Frances and Jacob Hiatt Scholarship: Established for deserving students, with preference to those from Worcester County; selection to be made by the President of the College.
The Hickey Family Scholarship: Established in 1989 by a bequest from David B. Lovell, Jr. '23. Preference given to residents of the State of Rhode Island.
Francis R. Hickey Memorial Scholarship Fund: Established in 1985 by a bequest from the estate of Marion R. Hickey for students in financial need.
The John W. Hodge Scholarship: Established in 1946 by a bequest from the late John W. Hodge to aid some worthy Catholic student from Cambridge, Mass., the terms and conditions of which are to be fixed and regulated by the College.
The Henry Hogan Scholarship: Established by gifts of Mr. Henry M. Hogan '18. Income to be awarded to worthy students selected by the President or faculty of the College.
Larry Hogan Scholarship Fund: Established in 1981 by Coleman F. and Margaret M. Hogan in memory of their son, Larry. Preference to needy students from St. Michael's Parish, Exeter, N.H., and, then, from the Southeastern New Hampshire area.
The John T. Holland '17 Memorial Scholarship: Established on Jan. 2, 1954, by a gift from Matthew M. Berman. To be used for worthy students selected by the President of the College.

The Holy Cross Jesuit Community Scholarship: Established in 1999 by the Holy Cross Jesuit Community to provide financial aid to a worthy student with preference for students from Jesuit high schools.
The Holy Cross Scholarships: These are a limited number of tuition or other partial awards that are made from the College funds, at the times and in the amounts that the financial position of the College permits.
Katherine H. Hoy Scholarship: Established on Dec. 14, 1959, by a bequest from the estate of James M. Hoy '05. Income to be used to assist a student with preference given to a needy and deserving student of St. Stephen's Catholic Parish of Worcester, Mass.
C. Keefe Hurley Scholarship: Established in 1970 by C. Keefe Hurley ' 29 to support and maintain an endowed athletic scholarship for students determined from time to time by the President of the College and President of the Varsity Club.
The John Collins Hurley Scholarship: Established on April 28, 1953, by a bequest from the estate of Margaret M. Hurley. Income to be used for education of a worthy graduate of Durfee High School, Fall River, Mass.
The Warren Joseph Hurley Scholarship: Established in 1929 by Mrs. Jeremiah J. Hurley in memory of Warren Joseph Hurley '29 for the benefit of one or more worthy students aspiring to the priesthood. Selection to be made by the President of the College.
The "In Memoriam" Scholarship: Established in 1915 by an alumnus of the College for a deserving student.
Thomas R. and Elizabeth Johnson Scholarship: Established in 1973 by a bequest from the estate of Elizabeth E. Johnson for the education of worthy students from Worcester, Mass., with preference given to students within the boundaries of Holy Rosary Parish.
The Thomas P. Joyce Memorial Scholarship: Established in 1995 by family and friends to honor Thomas P. Joyce '59.
Timothy F. Kane Scholarship Fund: Established in 1968 from the estate of Timothy F. Kane. Preference is to be given to a deserving student requiring financial assistance with preference to students from South Boston or Dorchester, Mass.
The F. Donald Kenney '39 Scholarship: Established from the estate of F. Donald Kenney in 1999 to provide financial aid to worthy students with preference for students from western New York.
The Rev. John C. Keveney Scholarship Fund: Established in 1973 by a bequest of Mary S. Weston to be used for scholarships to support and educate students deserving of an education.
The Rev. Charles J. Kimball, S.J., Scholarship: Established in June 1961, by a bequest from the estate of Rev. Arthur B. Kimball. Income to be used to aid a worthy student selected by the faculty.
The Otto Seidenbury King Scholarship: Established in October 1954, by gifts from Atty. John King '25. Income to be used for a deserving student from a Jesuit high school in the New York City area selected by the President of the College.
Thomas F. and Ellen A. King Scholarship: Established in 1969 by a bequest from the estate of Leo A. King '12. The income to be used toward the tuition of worthy students selected by the College.
The Rev. Michael H. Kittredge Scholarship: Established in 1917 by Rev. Michael H. Kittredge, Class of 1875 .

The Massachusetts State Council of Knights of Columbus Scholarship Fund: Established in 1937 by the Massachusetts State Council Knights of Columbus; open to members and sons of members of the Knights of Columbus residing and having their membership in the Order of Massachusetts. Award to be made by competitive scholastic examination under the administration of the College of the Holy Cross.
The Patrick W. Lally Memorial Scholarship: Established in March 1954 from the estate of James Lally to be awarded to a worthy graduate of St. Mary's High School, Milford, Mass., who will be selected by the President of the College of the Holy Cross.
Eleanor Laux Memorial Fund: Established in 1974 by John C. Laux '23 in memory of his wife.
Helen M. Lavigne Memorial Scholarship: Established in 1983 by Omer D. Lavigne '36 and his three children, in memory of his wife Helen. Income for a deserving student, male or female, based on financial need, who could otherwise not attend Holy Cross.
The Richard J. LaVigne, M.D., Scholarship: Founded and augmented with gifts in memory of Dr. Richard J. LaVigne '37, Joseph W. LaVigne and Dr. E. John Mango, the income from the fund will be used annually to assist a premedical student who has demonstrated need of financial aid.

The Michael J. Lawlor Scholarship: Established in February 1949 by a bequest from the late Retta M. Lawlor. Income to be used to aid a bright and needy student, a resident of Waterbury, Conn., who in the opinion of College authorities, shall be deserving financial assistance.
Father Leahy Fund: Established in 1960 by a bequest from the estate of Joseph C. Bland for the education of needy students entering the College of the Holy Cross.
W.H. Lee Milk Company Endowment Fund: Established on Sept. 4, 1959 with the provision that the income be added to the principal until Sept. 1, 1973. After September 1, 1973 the income is to be used for scholarship aid in accordance with specifications as set down in the agreements.
The Archibald R. LeMieux Scholarship: Established under the will of Archibald R. LeMieux for deserving students attending the College of the Holy Cross.
The John J. Leonard Scholarship of the M.C.O.F.: Founded in 1926 and restricted to members, or sons of members of the M.C.O.F. Selection is to be made by competitive examinations.
Clemens M. Linga Jr. Scholarship: Established in 1983 by Mr. and Mrs. Clemens M. Linga, Sr. in memory of their son, Clemens, Jr. '71. Income to be awarded to worthy and needy students from Worcester County with an interest in the field of law. Selections to be made by the President of the College.
The James B. and Catherine W. Longley Fund: Established by James B. Longley in memory of his mother and father.
The David B. Lovell Jr. Scholarship: Established in 1989 by a bequest from David B. Lovell Jr. '23. Preference given to residents of the State of Rhode Island.
The Edward C. Maher Scholarship: Established in 1981 by Edward C. Maher ' 40 for needy students from the immediate Worcester area.
The Jeanne R. Maher/Lawrence, Mass. Scholarship Fund: Established in 2004 by Thomas A. Maher ' 84 to provide scholarship assistance based upon financial need to benefit students who are residents of Lawrence, Massachusetts and who are graduates of Lawrence High School or Central Catholic High School.
Jeanne R. Maher/Xavier High School Scholarship Fund: Established in 2001 by Thomas A. Maher '84 for graduates of Xavier High School (New York) to provide scholarship assistance to students based upon their financial needs, academic achievement and exceptional commitment to the Jesuit ideal of service to others.
The Rev. John G. Mahoney, S.J., A Former Professor At The College, and James E. Mahoney '10, Memorial Scholarship: Established in 1946 by Mrs. Edward C. Donnelly in memory of her brothers; to be awarded to a deserving student studying for the degree of Bachelor of Arts in the Classical Course who is to be selected by the President of the College.
Dr. Francis J. Malumphy Scholarship Fund: Established through gifts from Dr. Thomas L. Malumphy.
Dr. E. John Mango Scholarship Fund: Established in memory of Dr. E. John Mango '50 by Dr. Richard J. LaVigne '37.
The Henry and Mary Margaret Mannix and Elmer and Helen Sperry Scholarship: Established in 1982 by John F. Mannix '52 and Helen Ward Sperry Mannix in honor of their parents. The income is to be used to aid a member of a minority group residing in the State of Connecticut.
The Mr. and Mrs. Anthony P. Marfuggi Scholarship Fund: Established in 1974 in memory of Mr. and Mrs. Anthony P. Marfuggi. Scholarship to be awarded at the discretion of the College.
The Ferdinand F. Martignetti '48 Scholarship: Established in 1991 by Robert and Mary Crane to honor Ferdinand F. Martignetti '48.
The Frank V. McBride '25 Merit Scholarship: A merit scholarship established in 1999 by a gift from Mrs. Frank McBride for demonstrably talented, ambitious and hardworking students with a preference for students from New Jersey.

The Henry Vincent McCabe Scholarship: Established in 1916 by the late Mary McCabe of Providence, R.I., for a deserving student.
The Rev. Dennis F. McCaffrey Scholarship: Established on Sept. 29, 1953, by a bequest from the estate of Rose A. McCaffrey.
McCahill-Harvey-Slottman Memorial Fund Scholarship: Established by Richard E. Harvey ' 42 in 1967 with income only to be awarded at the discretion of the President of the College.
William F. McCall Jr. Scholarship Fund: Established in 1986 by friends to honor William F. McCall, Jr. '55. The Fund is to be used to aid a student from the Boston area.
The Eugene and Margaret McCarthy Scholarship: Established in July 1962 by a bequest from the estate of Margaret McCarthy. Income to be used to aid a worthy student with preference to be given to a resident of Springfield, Mass.
The Joseph Allan McConville Scholarship: Established in 1991 to honor the deceased son of Eleanor and Joseph McConville '36.
The Peter McCord Scholarship: Established by Mary Lambert McCord for a deserving student.
The Paul L. McDermott '75 Scholarship: Established by Nomura America Foundation in memory of Paul L. McDermott' 75 for a student qualifying for financial aid.
The Reverend John F. McDonnell Scholarship: Established in June 1967 in memory of Rev. John F. McDonnell '00. Income to be used for the education of deserving and needy students. Selection to be made by the President of the College.
McEvoy Travel Scholarship: Established in 1969 by George A. McEvoy through the Mildred McEvoy Foundation.
The Rev. David F. McGrath Scholarship I: Established in 1907 by the Rev. David F. McGrath, Class of 1870, the beneficiary is to be selected by competitive examinations. Restricted to graduates of St. Mary's Parish School, Milford, Mass., if there is more than one eligible candidate. If there is only one eligible candidate, graduates of Milford Public High School may be admitted to competition; if there is only one candidate from both schools, any one otherwise eligible in the State is to be admitted to competition.
The Rev. David F. McGrath Scholarship II: Established in 1920 by the Rev. David F. McGrath, Class of 1870; conditions same as the Rev. David F. McGrath Scholarship I.
The Rev. David F. McGrath Scholarship III: Established in 1920 by the Rev. David F. McGrath, Class of 1870; conditions same as the Rev. David F. McGrath Scholarship I.
The Frank J. McHugh and Kathleen B. McHugh Scholarship Fund: Established on June 14, 1968 by a bequest from the estate of Frank J. McHugh, Jr. '38.
The Dr. Frederick J. McKechnie Scholarship: Established in December 1962 by a bequest from the estate of Mary I. Dunn.
The Monsignor John W. McMahon Scholarship: Established in 1938 under provisions of the will of Rt. Rev. Msgr. John W. McMahon ' 67 to give scholarship aid to a Holy Cross student to be designated by the Reverend Pastor of St. Mary's Parish, Charlestown, Mass. Preference is to be given to students coming from St. Mary's Parish.
The Katherine McQuade Scholarship: Established in June 1967 by a bequest from the estate of Katherine McQuade.
The Joanne F. and William J. McVay '54 Scholarship: Established in 1992 by Joanne F. and William J. McVay, M.D. '54 to provide financial aid to pre-medical students from the greater Pittsburgh, Pennsylvania area.

The Charles E.F. Millard Scholarship: Established by John F. Power Sr. '28, Cynthia and Jack Rehm '54 and other friends, classmates and family members to honor Charles E.F. Millard '54. Preference in making the award shall be to financially needy applicants from inner city communities in the Northeast or Midwest.
The Francis L. Miller Scholarship: Founded and augmented by gifts in honor of the late Francis L. Miller, Bursar of the College from 1931 to 1961. Income to be awarded to worthy and needy students with preference given to fatherless students.
The Francis Joseph and Esther Smith Moakley Scholarship: Established in 1996 by the estate of Francis Joseph Moakley '32. Annual income to provide partial scholarships to Connecticut domiciled high school graduates based on demonstrated good character, high scholastic achievement, leadership ability, local community volunteer involvement and the potential for greater contributions to the United States of America.
The George B. and Phyllis I. Moran Scholarship: Established in 1995 by a bequest from George B. Moran '33 and Phyllis I. Moran in memory of their parents.
The Joan Marie Mooney Endowed Scholarship: Established in 2005 by James F. Mooney, Jr. '52 and his son James F. Mooney III '90 in honor of their wife and mother, Joan Marie Mooney.
The Mary F. Mourin Memorial Scholarship Fund: Established in 1975 from the estate of Mary F. Mourin to aid in the financial assistance of students whom the Board of Trustees deems worthy and in need of financial aid residing in Worcester or Worcester County.
The Patrick J. Murphy Scholarship: Established in 1944 by Mrs. Ellen M. Murphy as a memorial to her husband, the late Patrick J. Murphy, of Worcester, Mass.
The Ellen M. and Robert C. Murray '68, P'93 Scholarship Fund: Established in 2002 by gifts from Ellen and Robert Murray. Preference shall be for African American students with large financial need.
The Monsignor Richard Neagle Scholarship: Established in 1943 by His Excellency the Honorable Alvan T. Fuller, former Governor of the Commonwealth of Massachusetts, in memory of the late Rt. Rev. Msgr. Richard Neagle of the Class of 1873, to assist students qualified, in the opinion of the faculty, who otherwise could not afford such an expenditure as would be necessary to enjoy the education and religious advantages of the College of the Holy Cross.
The Robert E. O'Coin '41 Scholarship: Established in 1987 by the Worcester Chamber of Commerce for financial aid scholarships for Worcester residents attending Holy Cross with preference given to commuters.
The Dennis F. and Lorretto Radle O’Connor Scholarship: Established on May 26, 1955 by Dr. Dennis F. O'Connor ' 93 to be used for a worthy student to be selected by College authorities.
Rev. Leo J. O’Connor, S.J., Scholarship: Established by friends of Father O'Connor to provide scholarships for students selected by the Trustees of the College of the Holy Cross.
The O'Driscoll Scholarship: Established in 1874, for a student (limited to residents of Worcester), who is a candidate for the priesthood and is selected by the Bishop of Worcester or his delegate.
The May and Sylvan Oestreicher Scholarship: Established on Dec. 30, 1957 by a gift from Sylvan Oestreicher.
The John F. O’Keefe Memorial Scholarship: Founded in 1984 and augmented with gifts in memory of John F. O'Keefe '51, Vice President for Business Affairs and Treasurer of the College from 1970 to 1984. Income to be awarded to a first-year student, preferably a Worcester-area student.

The Mary C. O'Neil Fund for Bristol County Students: Established on Jan. 7, 1955, by gifts from Margaret T. O'Neil, to be used to aid a student from Bristol County.
The Rev. Daniel H. O’Neill Scholarship I: Established in 1895; limited to residents of St. Peter's Parish, Worcester, Mass.
The Rev. Daniel H. O’Neill Scholarship II: Established in 1908; limited to residents of Worcester.

Patrick and Louise Whealen O'Reilly Merit Scholarship: Established in 2001 by James N. Barrett to honor the memory of his Newfoundland born maternal grandparents, Patrick J. O'Reilly and Louise Whelan O'Reilly. Income to be awarded to students born in the Canadian province of Newfoundland and Labrador. Should such a student not be found, there are conditions under which a student from Texas may be substituted.
Penhall-O'Rourke Scholarship: Established on Sept. 9, 1958, by a bequest from the estate of Dr. James J. O'Rourke '09 to be used for scholarships in aiding a deserving student.
Reverend Lawrence F. O’Toole Scholarship: Established in May 1966 in memory of Rev. Lawrence F. O'Toole '13 by his sister, Mrs. Florence Drury. Preference to priesthood aspirants with preference, first, to a member of St. Bernard's Parish, Worcester, Mass., and second, to anyone in the Diocese of Worcester.
The Lawrence F. O'Toole Scholarship: Established by a bequest from Lawrence F. O'Toole '10. Income to be awarded to worthy students selected by the Dean of the College.
The Joseph A. \& Dorothea H. Perrotta Memorial Scholarship: Established in 1986 by a bequest from the estate of Dorothea H. Perrotta, widow of Joseph A. Perrotta '28, Secretary to the President of the College from 1933 to 1972.
The Rev. Dr. Patrick B. Phelan Scholarship: Established in 1917 by Rev. Dr. Patrick B. Phelan, Class of 1869; open to competition for graduates of the Sacred Heart School, Holyoke, Mass.
The Reverend Michael G. Pierce, S.J., Scholarship Fund: Established by gifts from Robert H. McCooey '52.
The Reverend Michael G. Pierce, S.J., Scholarship: Established in 1983 by a bequest from George F. Duffy. Preference for a student from the St. Mary of the Hills Parish, Milton, Mass. Selection by the President of the College on the basis of scholarship, character and need.
The David H. Posner and Mary Murphy Posner Foundation: Established on July 1, 1957 by a bequest from the estate of Mary M. Posner. Income to be used toward tuition of worthy students.
The Mr. and Mrs. Aloysius F. Power Scholarship: Established by a gift from Mr. Aloysius F. Power '23. Income to be awarded to a student whom the College authorities judge to be in need of financial assistance and worthy of aid.
The Rev. John J. Power Scholarship: Established in 1907 by the late Rev. John J. Power, D.D., limited to residents of St. Paul's Parish, Worcester, Mass.
The Mary A. Prendergast Scholarship: Established in 1945 under the will of the late Mary A. Prendergast for deserving orphan students.
Stephen John Prior Scholarship Fund: Established in 1971 by the Prior family in memory of their son Stephen. Scholarships are to be awarded at the discretion of the College from income only.
The Purple Patcher Scholarship: Established in June 1963 by the staff of the yearbook, "The Purple Patcher," Class of 1963 and augmented by the staffs of the Classes of 1964, 1965, 1966 and 1967.
The Quid Retribuam Scholarship: Established in 1907 by a friend of education in gratitude for divine favors; if not filled by founder, competitive examinations will be held.
The Lillian A. Quinn Scholarship Fund: Established in 1968 by a bequest from the late Lillian A. Quinn. Income to be used to provide scholarship aid for worthy and needy students to be selected by the President of the College, preference given to students from Immaculate Conception Parish, Worcester, Mass.
The Patrick W. Rafferty Scholarship: Established in 1920 and open to competition among deserving students of Worcester.
In Memory of Dennis M. and Josephine R. Reardon Scholarship: Established on Jan. 11, 1952 by a bequest from the estate of Josephine F. Reardon. Income to be used to aid a worthy student preparing for the holy priesthood.

Matthew W. Reedy Scholarship: Established in 1983 by a bequest from Anna G. Fitman in memory of Matthew W. Reedy. Income for a student whose domicile is in the State of Massachusetts.
The John Reid Scholarship: Established in 1894 and limited to residents of Worcester, Mass.
Reverend Maurice F. Reidy, S.J., Scholarship: Established in 1984 by a gift from Mr. and Mrs. George Paletta, parents of George A. Paletta, Jr. '84, in memory of the Reverend Maurice F. Reidy, S.J. Income to be awarded to a needy student who participates in a minor sport, preferably lacrosse, and who has achieved a strong scholastic record. Selection to be made by the President of the College of the Holy Cross.
The Catherine F. Reilly Scholarship: Established on June 1, 1955 by a bequest from the estate of Joseph J. Reilly '04, in memory of his mother. Income to be used for a worthy student to be selected by College authorities.
The James H. Reilly Scholarship: Established on June 1, 1955 from the estate of Joseph J. Reilly '04, in memory of his father. Income to be used for a worthy student to be selected by College authorities.
The Reilly Memorial Scholarship: Established in 1922 by the late Joseph J. Reilly ' 04.
The Monsignor Paul Riedl Scholarship: Established in 2000 by a bequest from the estate of John Riedl in memory of his brother to provide assistance to College of the Holy Cross students with preference for graduates of public or parochial high schools in Worcester, Mass., or St. John's High School in Shrewsbury, Mass.

The Mary J. Robinson Scholarship: Established in 1943 by the late Mary J. Robinson in memory of her mother and father and brothers to assist deserving young men of the Roman Catholic faith in obtaining a collegiate education at the College of the Holy Cross.
The Michael J. Roche Family Fund: Established in 2005 from the estate of Catherine A. Roche to provide scholarship assistance to students of Hartford County, Connecticut.
The Rev. William H. Rogers Scholarship: Established in 1918 by Rev. William H. Rogers, Class of 1868.
Patrick and Mary McCauley Ronayne Scholarship: Established in 1973 by a bequest from the estate of Elizabeth E. Johnson for the education of worthy students from Worcester, such students to be selected by the Trustees of the College.
The Dorothy H. and Lewis Rosenstiel Scholarships: Established on Nov. 26, 1968 through a grant from The Dorothy H. and Lewis Rosenstiel Foundation, in memory of Dorothy H. Rosenstiel, to be awarded with preference to members of disadvantaged minorities, primarily Jewish, Black and Puerto Rican.

The Hon. John E. Russell Scholarship: Established in 1907 by a Friend of the College.
The Mr. and Mrs. John A. Ryan Family Scholarship Fund: Established in 1967 by Miss Mabel C. Ryan.
The Mabel C. Ryan Scholarship: Established in 1997 by the estate of Miss Mabel C. Ryan. Income to be used to defray in whole or in part the educational expenses of needy and worthy students.

The Rev. Michael J. Ryan Scholarship: Established in 1990 by a bequest from Rev. Michael J. Ryan. Income to be used for a student from St. Paul's Parish, Warren, Mass.; if none, any student.
The Robert E. Scannell Memorial Scholarship: Established in 1994 by family, classmates and friends to honor Robert E. Scannell '61.

Clarence G. Schilling Scholarship: Established in 1982 by a bequest from Clarence G. Schilling, a member of the Department of Mathematics faculty from 1945 to 1951. Income to be used for partial scholarships for students of character, ability and ambition.
The Scholler Foundation Scholarship: Established on October 24, 1955.
The John F. Scott Fund: Established by gifts from John F. Scott '08. Income to be used to aid worthy students from the State of Maine.

The Monsignor Seiter Scholarship: Established by a bequest in 1981 from the estate of Monsignor Aubrey R. Seiter '23. Income to be used for a worthy student from St. Michael's Parish, Rome, N.Y.
The James J. Shea, Sr., and Barbara Shea Brennan Scholarship Fund: Established in 1979 by a gift from Edward J. Brennan, Jr. '52 to honor James J. Shea, Sr., a recipient of an Honorary Degree from Holy Cross in 1968. Mr. Shea was Board Chairman of Milton Bradley Company of Springfield, Mass. Augmented by a gift in 1985 in memory of Barbara Shea Brennan.
Timothy A. Shea Scholarship Fund: Established by bequests from the estate of Timothy A. Shea in memory of his parents, Mr. and Mrs. Daniel M. Shea; a brother, Michael F. Shea; and sisters, Katherine and Elizabeth. Income to be used exclusively for non-resident students residing in Worcester and awarded on a competitive basis.
Audrey Sheldon Memorial Fund for Music and the Arts: Established in 1982 by the Merlin Foundation. Income is designated for the Dana Scholars Program.
Lt. Timothy J. Shorten Scholarship Fund: Established by his wife Darlene in memory of lst Lieutenant Timothy J. Shorten, U.S.M.C.R., '64. Income to be awarded to worthy and needy students designated by the College.
The Dr. John J. Slattery Scholarship Fund: Established in 1985 by a bequest from the estate of Dr. John J. Slattery ' 24 for the purpose of aiding needy and worthy students who are desirous of obtaining a pre-medical education.
The Elizabeth Spang Scholarship: Established in 1936 by the will of Elizabeth Spang of West Haven, Conn. This income to be used toward the education of a student of Holy Cross College whom the governing body of said College may deem to be in need of financial assistance for college work and worthy of said scholarship.
The Garrett H. Spillane III Scholarship: Established in 1986 by Garrett H. Spillane and Frances C. Spillane in memory of their son, Garrett H. Spillane III ' 80.
The Francis J. Steele, M.D., Scholarship: Established in 1981 by a bequest of Helen E. Steele in memory of her husband, Dr. Francis J. Steele '28.
Steppacher Student Athlete Scholarship: Established by Mary Steppacher in 1990 in memory of her husband, Gus Steppacher '30. First preference is to be given to a student athlete in need of financial assistance.
The Monsignor John E. Sullivan Scholarship Fund: Established in 1984 by a bequest from Msgr. John E. Sullivan '26. First preference is to be given to students from St. Camillus' Parish, Arlington, Mass.
Frances Hannon Sweeney Memorial Scholarship Fund: Established in 1986 by a bequest from the estate of Robert L. Sweeney '29.
Michael H. Sweeney Memorial Scholarship Fund: Established in 1986 by a bequest from the estate of Robert L. Sweeney '29.
Rev. Raymond J. Swords, S.J., Scholarship: Established by the Class of 1970 with income only awarded at the discretion of the College.
Suzanne J. Tassinari Scholarship: Established by a gift from Ernest P. Tassinari '48 in memory of his daughter, Suzanne Tassinari '78. To be awarded to worthy and needy students with first preference for graduates of Sacred Heart High School, of Kingston, Mass.
In Memory of Helen M. and John F. Tinsley Scholarship: Established on Nov. 20, 1953, by a bequest from the estate of John F. Tinsley. Income to be used to assist worthy students selected by the President of the College.
The R.J. Toomey Co. Scholarship: Established by gifts from John A. Toomey '28, Lawrence T. Toomey '30, and Richard J. Toomey '23.
The Frank W. and Violet Towey Scholarship Fund: Established by a bequest from the estate of Frank
W. Towey ' 16 . The income to be used for financial aid to students in accordance with standards determined by the Trustees of the College.
The Rev. David W. Twomey, S.J., Scholarship: Established on Oct. 10, 1955 by gifts from family and friends of Fr. Twomey, S.J. Income to be used to aid a worthy student.
The Robert P. Trudel '64 Scholarship Fund: Established in 2000 by members of the Class of 1964. Preference given to a son or daughter of a member of the Class of 1964 or to a graduate of Fairfield Preparatory School, Fairfield, CT.
The Maurizio Vannicelli Memorial Scholarship: Established in 1991 by the family, friends and former students of Professor Maurizio Vannicelli.
The Samantha Vellaccio Scholarship: Established in memory of Samantha Vellaccio to provide scholarship assistance to College of the Holy Cross students based on financial need with preference for a student who has declared a major in biology.
The Clune J. Walsh, Jr. Scholarship: Founded by The Home Life Insurance Company and augmented by gifts to honor Clune J. Walsh, Jr. '52. Priority consideration to be given to students pursuing a career in life insurance sales and marketing.
The Honorable David I. Walsh Scholarship Fund: Established by a gift from George J. Feldman H. '68 with scholarships to be awarded to students whom the College authorities judge to be in need of financial assistance.

The Rev. Robert Walsh Scholarship: Established in 1895, limited to residents of the Immaculate Conception Parish, Worcester, Mass.
The Charles S. Whelan M.D. '29 Premedical Scholarship Fund: Established in 1998 to provide scholarship assistance to Holy Cross premedical students.
The George J. White Memorial Scholarship Fund: Established in August, 1994 by a gift from George J. White '39.

The Paul J. Whitney '45 Scholarship: Established in 2003 by the estate of Paul J. Whitney ' 45 to provide scholarship assistance to students based upon financial needs with preference given to English majors.
The Stephen W. Wilby Scholarship: Founded by the Naugatuck Valley Alumni Association and friends in Connecticut.
The Edward Bennett Williams Scholarship Fund: Established in 1988 by family, friends and trustees of the College in honor of Edward Bennett Williams of the Class of 1941.
The John A. Willo Scholarship: Established by a gift from Mrs. John A. Willo in memory of her late husband. Income to be awarded to worthy and needy students selected by the President of the College.
Owen J. Wood Scholarship Fund: Established in May 1967 in memory of Owen J. Wood '66 by The Worcester Undergraduate Club. The income is to be used to provide financial aid to a Worcester area student, with preference given to orphans.
Worcester Federal Savings and Loan Association Educational Fund: Established on April 1, 1960.
The Edward Avery Wyatt IV: Established in 1998 by John E. Luth '74 and Elizabeth S. Wyatt in honor of her father, Edward Avery Wyatt IV. The scholarship shall provide financial aid to one or more students who have a demonstrated interest in journalism or other literary pursuits.

## Financial Aid Acknowledgements

Many Holy Cross alumni clubs sponsor students of their selection for complete or partial tuition scholarships. Among those who have participated in this program are: Holy Cross Alumni Club of Worcester, Holy Cross Club of Boston, Holy Cross Club of Long Island, Holy Cross Club of New York, Holy Cross Club of Rhode Island, the Holy Cross Club of Eastern New York, Holy Cross Club of Rochester, and the Holy Cross Club of Pioneer Valley. Many of these clubs are annual contributors; others contribute at various times.

Grateful acknowledgement is also due to the many corporations, foundations, fraternal organizations, P.T.A.s, high school associations and similar groups that have aided students by financial contributions toward tuition costs.

## The Office of the College Chaplains

The mission of the Office of the College Chaplains is rooted in the Gospel of Jesus Christ and supports the mission of the College of the Holy Cross. The College Chaplains strive to witness to and proclaim the Gospel, grounding our ministry in the rich intellectual, spiritual, service, and prophetic traditions of the Society of Jesus and the Roman Catholic Church.

In particular, the College Chaplains are committed to a ministry which reflects the inclusiveness of the Catholic Church at its best by building community through worship, dialogue, service, outreach, prayer, ecumenism, and the integration of living and learning. This involves participating in the intellectual life of the College in the search for truth and the integration of faith and reason. The celebration of faith in prayer and worship is central to this mission with liturgies from the vast and evolving tradition of the Catholic Church, centered in the Eucharist, but welcoming and celebrating the richness of our diverse religious traditions through ecumenical and interfaith services. In service to the wider Church and society, this ministry embraces a faith that does justice and thus both challenges the Holy Cross community to a critique of contemporary society and calls forth and prepares Holy Cross men and women to assume roles of vibrant leadership for the future of the Church.

## Student Affairs

## The Division of Student Affairs Mission Statement

The Division of Student Affairs, in the context of a residential environment, assists students in their growth and development in every facet of life: intellectual, psychological, social, spiritual, cultural, physical, and vocational. Serving as educators, our programs and services help students develop the skills that will enable them to live purposeful and balanced lives. In partnership with other members of the College community, we foster an environment in which the pursuit of excellence permeates our efforts.

Informed by Ignatian principles, we encourage students to seek God in all the diversity of persons and things. We teach students to exercise leadership in service to others, and to participate and promote a community characterized by caring and respect for the worth and dignity of every human being.

Our contribution to the quality of the Holy Cross education is measured by the degree to which our students become known as leaders, are seen for their strength of character, are respected for their commitment to faith, family, and community, and are regarded as exemplary citizens who apply their talents and abilities in service to others.

## The Office of the Vice President for Student Affairs

Five offices report directly to the Vice President for Student Affairs. These offices represent the distinctive functions of the Division: Student Life, Student Development Services, Judicial Affairs, Multicultural Education, and Public Safety. The organization brings together several Student Affairs professionals under an Associate Dean for Student Life, an Associate Dean for Student Development Services, an Assistant to the Vice President and Director of Judicial Affairs, an Assistant Dean and Director of Multicultural Education, a Director of Public Safety, a Director of Special Projects, and a Special Assistant to the Vice President for Student Affairs.

## Community Standards

When students accept admission to the College of the Holy Cross, they accept the rights and responsibilities of membership in the College's academic and social community. High standards have been established for membership in this community, including high standards of personal conduct and behavior. The College of the Holy Cross assumes that all students will abide by the policies, rules, and regulations of the College and by state, local, and federal laws. Community Standards and Disciplinary Procedures have been established to address allegations of student misconduct.

The student conduct and discipline system exists to protect the rights of all members of the College of the Holy Cross community and of students accused of violating the community standards. The discipline system is designed to educate students and encourage sound decision making.

## Office of Multicultural Education

The Office of Multicultural Education educates, promotes and serves to empower the campus community on issues of diversity, multiculturalism, and the value of human differences. In keeping with Holy Cross' mission and heritage of developing caring and just communities, the Office of Multicultural Education advocates an awareness of and sensitivity toward differences of race, culture, ethnicity, national origin, gender, age, sexual orientation, religion and disabilities among its students, faculty, administrators, and staff. Through classes, workshops, training sessions, peer education and consultations, opportunities are provided for growth and development of each member of the community. These programmatic activities are offered to increase educational awareness, initiate critical thinking, encourage dialogue and discussion and promote constructive analysis around differences within the human experience. It is our belief that through the exchange of diverse ideas we open ourselves to achieving greater understanding
and greater engagement of thought. Participation by all campus members ensures our campus to be one which is responsive to and reflective of the diversity found within its community.

Our mission statement also guides us to be a community with shared responsibility for integrated learning-challenging our own assumptions, exposing our own beliefs, and expanding our own experiences, thereby preparing our students to become socially responsible and informed citizens in our everchanging national and global arenas. Underlying this mission is the goal for the entire community to acquire further knowledge and the applicable skills needed to effectively address any behaviors, thoughts, and feelings that interfere with honest exchange and cross-cultural understanding.

The College of the Holy Cross is firmly committed to the positive development of a campus that is supportive of and conducive to all of its members. It is an institutional priority.

## Student Life

## Residence Life

As a residential college, much of the campus life at Holy Cross is centered around the residence halls. Residence life is designed to complement the in-class learning experience. The halls are supervised by professional live-in staff members, Student Resident Directors, and resident assistants (RAs). Resident assistants are students who are selected for their maturity, responsibility and leadership qualities.

Many learning opportunities occur in the residence halls. The RAs coordinate a wide variety of social, educational and cultural programs. Additionally, a budget is allotted to each residence hall, allowing the elected house council members to coordinate programs and activities. Faculty members affiliate with residence halls to enhance student-faculty relationships on a more informal level. Faculty may attend hall activities or plan off-campus outings. Other activities, such as informal get togethers, cookouts, intramural games, as well as other more spontaneous activities, have proven to be successful and enjoyable ways to build residence hall communities.

To assist in forming a positive living-learning community, each resident is expected to respect the rights of others, respect the physical environment and uphold the values of the College. An atmosphere of friendly cooperation and mutual consideration assures that the halls will be enjoyable places to live and learn.

## Student Programs and Leadership Development

Holy Cross offers a wide variety of student activities, co-curricular opportunities, leadership development experiences, cultural events, and formal and informal entertainment that not only provides a respite from the rigors of academic life, but also encourages individual creativity, intellectual development, and an awareness of issues confronting society. Co-curricular involvement has long been considered an integral part of the College and all students are encouraged to participate in the wide range of clubs, organizations, events, and activities available.

There are over 120 student clubs and organizations devoted to academic pursuits, special interest activities, recreational groups, service organizations, print and broadcast media and performing troupes. Most student activities are financed through the student activities fee, which is allocated by the Senate Budget Committee, a sub-committee of the Student Government Association (SGA) Senate. The SGA, the central representative body of Holy Cross students, consists of elected officers and students who are appointed to serve on various student-faculty and student committees, as well as active College committees.

## Events

In the realm of cultural and entertainment events, many organizations contribute to the planning and presentation of major speakers, social events, symposia, and other activities that range from the intellectually stimulating to the purely entertaining.

The Campus Activities Board (CAB) plays a major role in arranging for the appearance of prominent speakers. Major events in recent years sponsored by CAB and other organizations have included speeches by Reverend Jesse Jackson, Arun Ghandi, and Holy Cross alum Supreme Court Justice Clarence Thomas.

On the lighter side, entertainment events by outside groups and individuals, as well as by College organizations, play a major role in Holy Cross co-curricular activities.

CAB sponsors musical and comedic performers throughout the academic year. Howie Day, Rusted Root, Starting Line, Gavin DeGraw, Wyclef Jean, Fabolous, and Third Eye Blind are a sample of our most recent concert performances. Comedians Jay Mohr, Dane Cook and Gerald Kelly have also performed at the College.

The Fenwick Theatre Company and the Alternate College Theatre are the major dramatic organizations on campus. Recent productions have included: The Tempest; Grease; Anything Goes; Pippin; Baby with the Bath Water and Damn Yankees. Campus musical organizations include the College Choir, Jazz Ensemble, Crusader Goodtime Marching Band, Holy Cross Chamber Orchestra, Chamber Singers, and the Light Opera Company, all of which present concerts throughout the year.

## Student Development

## Counseling Center

Students in college sometimes encounter personal problems that can be difficult to negotiate alone. These problems can affect a student's ability to achieve personal, career and academic goals. The psychologists and professional staff at the Counseling Center provide a variety of services to assist students in resolving problems, learning about themselves and others, and promoting personal and intellectual growth and development. Off campus referrals are made for students requiring specialty care. The psychological counseling services offered at the Center are based on interventions designed to help students resolve developmental issues of early adulthood. Among the services offered by the Center are:

- Individual counseling directed toward the resolution of personal problems.
- Educational and career counseling and testing to promote the identification and implementation of appropriate academic and career goals.
- Developmental groups and workshops designed to address common student concerns such as stress management, depression, self-esteem, personal growth, relationships, eating disorders, and family problems.
- Lectures and open discussions on topics related to human development that are of interest to students.
- Advisement, training, and consultation for resident assistants and other peer educator groups.
- Referral for psychiatric evaluation provided through UMass Memorial Medical Center, University Campus.
- Consultation for students, faculty, and staff about others for whom they have concerns.

The services offered at the Counseling Center are available to all current full-time students and are confidential. Students interested in making an appointment and those dealing with a psychological emergency, may call the Center at (508) 793-3363 or visit Hogan 207 from 9 a.m. to noon and 1 to 5 p.m. For psychological emergencies after hours and on weekends, the psychologist on call can be reached by calling Public Safety at ext. 2222.

## Career Planning Center

A strong liberal arts education is an excellent foundation for occupational success. The achievements of Holy Cross graduates across the spectrum of careers are a testimony to the value of a Holy Cross education in relation to career development. Although the academic experience at Holy Cross facilitates the development of skills that are crucial for career success, it does not focus or direct a student to any particular occupational area. For this reason early involvement in career development activities maximizes the career opportunities that will be available to a student upon graduation.

The staff of the Career Planning Center assists students in identifying and clarifying their career objectives, teaches skills and strategies for conducting a successful job search, and provides resources for students seeking entry-level professional positions and internships. Students are encouraged to utilize career planning resources beginning in their first year and throughout their four years at Holy Cross.

The resources and programs offered by the Center include: individual career counseling, career exploration groups, internship databases, workshops, mock interviews, career panels, a shadowing program, on-campus recruiting, resume referral, career fairs, summer job postings, a credential file service, career resource library, newsletters, and Web site.

A database of Holy Cross graduates who have volunteered to serve as career advisors is also available
to students. The Office participates in the following consortia which provide additional internship and employment opportunities for students: Liberal Arts Career Network (LACN), The Venture Consortium, the Massachusetts Educational Recruiting Consortium (MERC) and the Liberal Arts Recruiting Connection.

Career Planning services are available to all students. The Office is located in Hogan 203 and is open from 9 a.m. to 5 p.m. during the academic year. Summer hours are 8:30 a.m. to 4:30 p.m.

## Summer Internship Program

The Holy Cross Summer Internship Program provides exceptional, prescreened Holy Cross undergraduates with an opportunity to gain meaningful work experience in an area related to a student's occupational goals. Through a competitive application process, selected sophomores and juniors are invited to apply for paid internships with the nation's leading employers and organizations. Internships are developed through the network of Holy Cross alumni, parents, and friends throughout the country and earmarked and designed specifically for Holy Cross students. Internships are generally 8-10 weeks in length and require a minimal commitment of 35 hours per week. The Summer Internship Program is located in Hogan Center, room 203.

## Office of Disability Services

The Office of Disability Services coordinates assistance for disabled students in order to promote equal access to College programs and services. The office seeks to assist students and their families in making the necessary arrangements to facilitate full participation in academic and extracurricular pursuits.

The College of the Holy Cross complies with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and applicable local, state and federal statutes regarding nondiscrimination against persons with disabilities.

The Office of Disability Services is located within the Counseling Center in Room 207 of the Hogan Campus Center. The director of the office or a designee is available for consultation and may be contacted by telephone at (508) 793-3363, TTY: (508) 793-3591, or FAX: (508) 793-2778.

## Health Services

The mission of Health Services is to support our students in the achievement of their educational goals by maintaining and improving their health and the health of the College community. Demonstrating its commitment to quality and excellence, Health Services is accredited by the Accreditation Association for Ambulatory Health Care, Inc. (AAAHC) and an institutional member of the American College Health Association.

Health Services is located in Loyola Hall. Hours of operation are Monday through Friday, 7:30 a.m. - 6:30 p.m., Saturdays, 10 a.m. - 4 p.m. during the academic year. Health Services is a medical clinic on campus to meet the student's primary care and urgent care needs. In addition, Nutrition Therapy, Asthma Education, Smoking Cessation, Massage Therapy, Reiki Therapy, and allergy injections are available at Heath Services.

Board-Certified Family Practice Physicians affiliated with UMass Memorial Medical Center are available by appointment Monday through Friday, 20 hours per week. Public Safety responds to emergencies. An on call physician is available for acute illness after hours at (508) 792-8830. Health Services is also staffed by Family Nurse Practitioners and Registered Nurses. Appointments can be scheduled by calling (508) 793-2276.

## Wellness Programming

The primary goal of the Office of Wellness Programming is to coordinate the Alcohol and Drug Prevention Program of the College. All departments within the Office of Student Affairs play a role in implementing the college alcohol policy through education or enforcement. Students are informed about the laws pertaining to alcohol use, the college policy, community standards, and the consequences to oneself and others as the result of participating in high risk drinking. Wellness Programming aims to create an atmosphere on campus that encourages students to make responsible, low risk choices in regards to the use of alcohol and/or other substances.

In addition Wellness Programming provides opportunities for students, faculty and staff to participate in activities that will promote optimal wellness.

The resources and programs offered by the office include: the coordination of "AlcoholEdu" and online alcohol prevention program, individual meeting with students who have been sanctioned for alcohol violations, Yoga, Pilates, a Wellness newsletter, a campus wide Wellness Fair and coordination of two Peer Advisor Programs: the Students for Responsible Choices, and the Sexual Awareness Peer Educators (SHAPE).

The director will provide training and consultation to a wide variety of student groups as well as consultation and referral to individual students in all areas of wellness including stress management, nutrition and healthy eating. The office is located in Hogan 511A, and is open from 9 a.m. -5 p.m. Monday through Friday.

## Athletics and Recreation

## Mission Statement

The Mission of the Athletic Department of the College of the Holy Cross is to promote the intellectual, physical, and moral development of students. Through Division I athletic participation, our young men and women student-athletes learn a self-discipline that has both present and long-term effects: the interplay of individual and team effort; pride and self-esteem in both victory and defeat; a skillful management of time; personal endurance and courage; and the complex relationships between friendship, leadership, and service. Our athletics program, in the words of the College Mission Statement, calls for "a community marked by freedom, mutual respect, and civility."

Besides teaching these virtues, a few sports played at Holy Cross have the added value of focusing alumni and student support and enhancing our reputation locally and nationally. While Holy Cross continues to commit itself to accomplishment in these sports, which are a rich part of our tradition, we choose to do so in a way that complements the pursuit of academic excellence.

Holy Cross is committed to the guiding principles of the Patriot League, of which we are a founding member: presidential control of athletics; the cultivation of the ideal scholar-athlete; and participation in a wide variety of sports. Commitment to the last principle assures that the College sponsors, in a very evident way, gender equity.

The Department of Athletics is also committed to compliance with all College policies and regulations involved in Division I membership in the National Collegiate Athletic Association (NCAA) and the Eastern College Athletic Conference (ECAC). As a member of the NCAA, Holy Cross also advocates student-athlete welfare, diversity, gender equity, sportsmanship, and ethical conduct in its athletic programs.

## Intercollegiate Sports

Sponsoring a comprehensive athletic program at the NCAA Division I level, the College has 27 varsity athletic teams. Intercollegiate sports for men are baseball, basketball, rowing, cross country, football, golf, ice hockey, lacrosse, soccer, swimming, tennis, and indoor and outdoor track and field. Crusader women compete in basketball, rowing, cross country, field hockey, golf, ice hockey, lacrosse, soccer, softball, swimming, tennis, indoor and outdoor track and field, and volleyball. A charter member of the Patriot League, Holy Cross competes with American, Army, Bucknell, Colgate, Lafayette, Lehigh, and Navy in conference play. In non-league competition, the Crusaders face several of New England's top Division I programs, including many opponents from the Ivy League. The men's ice hockey team is a member of the Atlantic Hockey Association. The Women's Golf Team is a member of the Big South Conference.

## Clubs and Intramurals

The College sponsors co-ed clubs in equestrian, sailing, skiing, soccer, Ultimate Frisbee and ballroom dancing. For women, there are lacrosse, rugby and water polo clubs, while men participate in ice hockey, lacrosse and volleyball at the club level. The College also provides an active intramural program. Men participate in basketball and flag football at the intramural level. Women's intramural basketball is also a popular activity. Men and women compete together in softball, tennis, floor hockey and volleyball.

## Facilities

Athletic facilities at Holy Cross are excellent. The College's athletic fields are superbly maintained by its award-winning grounds staff. The football stadium seats 23,500 . A lighted Astro-turf field, which was resurfaced in 2000, is surrounded by an eight-lane running track. Baseball and softball fields are located on the lower campus. Construction of a new 2,800-seat baseball stadium was completed in spring 2005. A new soccer facility seating 1,320 is under construction and will be available for play in 2006.

The Hart Recreation Center serves as home to the Crusader basketball, swimming, hockey and volleyball teams. In addition to the 3,600 -seat basketball arena, 1,400 -seat ice rink, and six-lane swimming pool with a separate diving area, the Hart Center features squash and racquetball courts, locker and shower facilities, exercise equipment and a rowing practice tank. The newest addition to the Hart Center is a state-of-the-art wellness center. The wellness center includes a specialized strength and conditioning facility for varsity student-athletes, as well as aerobic equipment and workout areas for the general student body.

The fieldhouse has a tartan surface and contains basketball and volleyball courts, a running track, and locker rooms. The fieldhouse also serves as a practice site for several teams and clubs.

The men's and women's crew teams have the good fortune of rowing on Lake Quinsigamond, scene for many years of the Eastern Sprints rowing regatta and considered one of the world's finest venues for crew. The lake also serves as the home port for the sailing club.

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M.A., Providence College

Wedding Coordinator

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Cert., Black Ministries Program, Hartford Seminary
Ordained Minister, John Street Baptist Church
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M.Div., Regis College of Toronto
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Rev. Alfred R. Desautels, S.J.
Professor Emeritus, French
Daniel G. Dewey
Associate Professor Emeritus, Mathematics
John H. Dorenkamp
Professor Emeritus, English
James T. Flynn
Professor Emeritus, History
Theodore P. Fraser
Professor Emeritus, French
William A. Green
Professor Emeritus, History
Roy C. Gunter, Jr.
Professor Emeritus, Physics

Kenneth F. Happe<br>Associate Professor Emeritus, Classics<br>William R. Healy<br>Professor Emeritus, Biology<br>Hilde S. Hein<br>Associate Professor Emerita, Philosophy

Edward J. Herson Jr.<br>Associate Professor Emeritus, Theatre

Thomas P. Imse

Professor Emeritus, Sociology
Rogers P. Johnson
Associate Professor Emeritus, Sociology/ Anthropology

Francis W. Kaseta

Associate Professor Emeritus, Physics

## Edward F. Kennedy

Professor Emeritus, Physics
George N. Kostich
Associate Professor Emeritus, Russian
Normand J. Lamoureux
Professor Emeritus, French
Gerard B. Lavery
Associate Professor Emeritus, Classics
Thomas M.C. Lawler
Professor Emeritus, English
Banadakoppa T. Lingappa
Professor Emeritus, Biology
John T. Mayer
Professor Emeritus, English
B. Eugene McCarthy

Professor Emeritus, English
John F. McKenna
Professor Emeritus, French

## Paul D. McMaster

Professor Emeritus, Chemistry

## Ogretta McNeil

Associate Professor Emerita, Psychology

## John D. O'Connell

Associate Professor Emeritus, Accounting and Economics

## William J. O’Halloran, S.J.

Associate Professor Emeritus, Psychology
Vice President Emeritus
Peter P. Parsons
Associate Professor Emeritus, Biology
Clyde V. Pax
Professor Emeritus, Philosophy

## Peter Perkins

Professor Emeritus, Mathematics
Frank Petrella Jr.
Professor Emeritus, Economics
James F. Powers
Professor Emeritus, History

## Terri Priest

Associate Professor Emerita, Visual Arts

Ram S. Rana<br>Professor Emeritus, Physics

John E. Reilly<br>Professor Emeritus, English

## Robert W. Ricci

Professor Emeritus, Chemistry

Joseph S. Scannell, S.J.

Assistant Professor Emeritus, Visual Arts

Patrick Shanahan

Professor Emeritus, Mathematics
Frank Tangherlini
Associate Professor Emeritus, Physics
Melvin C. Tews
Associate Professor Emeritus, Mathematics

## William Zwiebel

Professor Emeritus, Modern Languages and Literatures

## College Councils and Committees, 2005-2006

## Finance and Planning Council

Ex Officio

Stephen C. Ainlay
Michael J. Lochhead
Katherine M. McElaney
Michael C. McFarland, S.J.
Jacqueline D. Peterson
Frank Vellaccio

## Teaching Faculty

Division A
Joshua R. Farrell (June '07)
Division B
Helen M. Whall (June '07)
Division C
David J. Schap (June '06)
Division D
Alice L. Laffey (June '06)

## Administrative Faculty

Ann B. McDermott (June '07)

## Student Life Division

Kristine Cyr Goodwin (June '06)
Students
TBD (3)

## Student Life Council

## Ex Officio

Kristine Cyr Goodwin
Neal E. Lipsitz
Katherine M. McElaney
G. Earl Peace, Jr.

Jacqueline D. Peterson
Richard M. Regan Jr.
Matthew A. Toth

## Teaching Faculty

Edward T. O’Donnell (June '06)
on leave 2005-2006
Carolyn Howe (June '06)
replacing Prof. O'Donnell
Gareth E. Roberts (June '06)
Shelby T. Weitzel (June '07)
Students
TBD (4)

## Academic Affairs Council

## Ex Officio

Stephen C. Ainlay, Vice President for Academic Affairs/Dean of the College
Mary Lee Ledbetter, Speaker of the Faculty (June '06)

## Teaching Faculty

Division A
Sharon M. Frechette, Mathematics \& Computer Science (June '07)
Kornath Madhaven, Biology (June '06)
Kenneth V. Mills, Chemistry (June '06)
Tomohiko Narita, Physics (June '06)

## Division B

Daniel Frost, Modern Languages \& Literatures (June '07)
Sarah Grunstein, Music (June '07)
Patrick J. Ireland, English (June '06)
Cristi Rinklin, Visual Arts (June '06)
William J. Rynders, Theatre (June '07)
Division C
James Bryant, Sociology \& Anthropology
(June '07)
on leave spring 2006
Thomas R. Gottschang, Economics (June '07)
Annette R. Jenner, Psychology (June '06)
Stephen A. Kocs, Political Science (June '06)

## Division D

Lawrence E. Cahoone, Philosophy (June '06)
Thomas W. Worcester, S.J., History (June '06)
William J. Ziobro, Classics (June '07)
TBD, Religious Studies

## Administrative Faculty

Paul F. Covino (June '07)
James E. Hogan (June '06)

## Students

TBD (2)

## General Committees of the Faculty

Committee on Faculty Affairs
Division A
Jane M. Van Doren, Senior Rank (June '06)
Cristina Ballantine, Junior Rank (June '07)
Division B
John T. Cull, Senior Rank (June '06)
on leave 2005-2006
Jessica P. Waldoff, Senior Rank (June '06) replacing Prof. Cull
Christine A. Coch, Junior Rank (June '07)

## Division C

Katherine A. Kiel, Senior Rank (June '07)
Loren R. Cass, Junior Rank (June '06)
Division D
Frederick J. Murphy, Senior Rank (June '07)
William A. Clark, S.J., Junior Rank (June '06)
At-Large
Kolleen J. Rask (June '06)

## Committee on Tenure and Promotion

## Ex Officio

Stephen C. Ainlay, Vice President for Academic
Affairs/Dean of the College
Michael C. McFarland, S.J., President

## Teaching Faculty

Division A
Randy R. Ross (June '07)
Edward J. Soares (June '06)
Division B
Edward Isser (June '06)
James J. Miracky, S.J. (June '07)
Division C
Victoria L. Swigert (June '07)
Amy R. Wolfson (June '06)

Division D
Nancy E. Andrews (June '06)
Todd T. Lewis (June '07)

## Standing Committees of the Faculty

## Committee on Academic Standing

Ex Officio

Stephen C. Ainlay
Ann B. McDermott

## Teaching Faculty

Mary K. Ebbott (June '07)
James M. Kee (June '06)
Kolleen J. Rask (June '06)
Thomas W. Worcester, S.J. (June '07)

## Committee on the Curriculum

## Ex Officio

Stephen C. Ainlay
Richard E. Matlak

## Teaching Faculty

Division A
John B. Little III (June '06)
Tomohiko Narita (June '07)
Division B
Josep Alba-Salas (June '07)
James J. Miracky, S.J. (June '06)
Division C
John F. Axelson (June '07)
Caren Dubnoff (June '06)
Division D
Noel D. Cary (June '06)
Karsten R. Stueber (June '07)
Students
TBD (2)

## Committee on Interdisciplinary and Special Studies

## Ex Officio

Richard E. Matlak, Director
Gary P. DeAngelis, Associate Director
(Special Programs)
Susan M. Cunningham, Associate Director (Concentrations)
TBD (Committee on Concentrations Representative)
TBD (Committee on Special Programs Representative)

## Teaching Faculty

Jeffrey A. Bernstein (June'06)
Judith A. Chubb (June '07)
Mary A. Conley (June '07)
Suzanne R. Kirschner (June '06)

## Students

TBD (2)

## Committee on Fellowships, <br> Research and Publication

## Ex Officio

Charles S. Weiss
Division A
Madeline Vargas (June '06)
Division B
Isabel Alvarez Borland (June '07)
Division C
Richard C. Schmidt (June '06)
Division D
Theresa McBride (June '06)

## Committees of the Faculty Appointed by the Dean of the College

Committee on Study Abroad

## Ex Officio

Maurice A. Géracht, Director
Brittain Smith, Assistant Director
Karen Sweetland-Dion, Assistant Director

## Teaching Faculty

Cristina Ballantine (June '06)
Robert W. Baumann (June '07)
on leave fall 2005
Sahar Bazzaz (June '06)
on leave spring 2006
TBD (3)

## Committee on Premedical and Predental Programs

## Ex Officio

Andrew M. Futterman, Chair

## Teaching Faculty

Alison L. Bryant (June '08)
Miles B. Cahill (June '08)
Matthew B. Koss (June '07)
Alice L. Laffey (June '07)
Ann Marie Leshkowich (June '06)
William E. Stempsey, S.J. (June '06)

## Committee on Graduate Studies and Fellowships

## Ex Officio

John T. Cull, Graduate Studies
Advisor and Chair
Mark Freeman
Esther L. Levine

## Teaching Faculty

Shawn Lisa Maurer (June '06)
replacing Prof. Novarro
Kenneth V. Mills (June '07)
Neva K. Novarro (June '07) on leave 2005-2006
Karen A. Ober (June '08)
Constance S. Royden (June '06)
Community Standards Board

## Ex Officio

Jacqueline D. Peterson
Paul Irish

## Teaching Faculty

Katherine Aubrecht (June '06)
Mary Conley (June '06)
Gareth Roberts (June '06)
Stephanie Yuhl (June '06)
TBD (2)
College Committees Reporting to the President of the College

Board of Directors of Alumni
Association
Ellen Perry (June '06)
Appointed Faculty or Administrator TBD (1)

## Athletic Council

## Ex Officio

Michael J. Lochhead
Richard M. Regan Jr.
Frank Vellaccio

## Teaching Faculty

John F. Axelson (June '07)
John T. Cull (June '06)
Scott Sandstrom (June '08)
Campus Center Advisory Council

## Ex Officio

Michael J. Lochhead
Jeremiah O'Connor
Jacqueline D. Peterson
Frank Vellaccio

## Teaching Faculty

TBD (2)
Alumni
TBD (2)
Students
TBD (2)

## College of the Holy Cross

Incorporated as "Trustees of the College of the Holy Cross" in the Commonwealth of Massachusetts in 1865, The College of the Holy Cross admits qualified students of any race, color, national and ethnic origin, sex, age or handicap to all the rights, privileges, programs and activities generally accorded or made available to its students. It does not discriminate on the basis of race, color, national and ethnic origin, sex, age, sexual orientation or handicap in the administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs. Applicants seeking information on these matters should call or write Affirmative Action Officer, The College of the Holy Cross, One College Street, Worcester, MA 01610, phone: (508) 793-3595.

The College Catalog is a document of record issued in August 2005. The Catalog contains current information regarding the College calendar, admissions, degree requirements, fees, regulations and course offerings. It is not intended to be, and should not be relied upon, as a statement of the College's contractual undertakings.

For a copy of the College's current Financial Report, call the Treasurer's Office at (508) 793-2515, or view it via the Internet at http//:www.holycross.edu.

The College reserves the right in its sole judgment to make changes of any nature in its program, calendar or academic schedule whenever it is deemed necessary or desirable, including changes in course content, the rescheduling of classes with or without extending the academic term, canceling of scheduled courses and other academic activities, and requiring or affording alternatives for scheduled courses or other academic activities, in any such case giving such notice thereof as is reasonably practicable under the circumstances.

The College is accredited by the New England Association of Schools and Colleges, Inc., a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering post-graduate instruction.

Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the New England Association is not partial but applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the status of an institution's accreditation by the New England Association should be directed to the administrative staff of the school or college. Individuals may also contact the Association at the Sanborn House, 15 High St., Winchester, MA 01890.

## Office of the General Counsel

The Office of the General Counsel is responsible for providing all legal services, preventive legal guidance, and legal advice to the College on a broad spectrum of legal issues that arise in its operation. The Office of the General Counsel is also responsible for engaging the services of outside law firms for specialized legal needs as well as coordinating and supervising the work of outside counsel. The Office of the General Counsel represents the College in all legal matters. It does not represent students, faculty, or staff in personal matters or personally in matters relating to the College, except in those circumstances where the individual is named a defendant in litigation regarding actions taken in the course and scope of his or her employment at the College. Communications regarding legal matters of the College that are directed to the Office of the General Counsel are ordinarily protected by attorney-client privilege and are confidential.

The Office of the General Counsel is located in Hogan Campus Center, Room 312. Telephone (508) 793-3759.

## Harassment Policy

Holy Cross prides itself as a community that nurtures the growth and development of all its members. In such a community each individual is entitled to respectful treatment from others in an environment free from harassment. To ensure such an environment, the College has adopted the following policy. The goal of the policy is not simply to enforce limitations on harassment encoded in civil rights legislation, but to transcend legal considerations and appeal to principles governing honorable behavior in a just and principled community.

Title VII of the 1964 Civil Rights Act defines sexual harassment as "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

1. submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment;
2. submission to or rejection of such conduct by an individual is used as a basis for employment affecting that individual; or
3. such conduct has the purpose or effect of unreasonable interfering with an individual's work performance or creating an intimidating, hostile, or offensive work environment" (see Note 1).
Title IX of the Education Amendments of 1972 requires an educational institution to provide an environment free of discrimination on any grounds. Massachusetts General Laws Chapter 151B stipulates that it is unlawful to retaliate against an employee for filing a complaint of sexual harassment or for cooperating in an investigation of such a complaint. Retaliation for complaints of harassment is itself a violation of the College policy. As a measure of the seriousness that the College regards this entire issue, any employee who is found after an investigation to have harassed another in the workplace will be subject to appropriate discipline up to and including termination, depending on the circumstances of the situation.

Holy Cross is committed not only to enforcing the law but also to protecting the community from any form of harassment that serves to degrade the status of another human being. Most often, harassment objectifies a personal attribute, singling it out for ridicule, attack, or disparagement. Examples include, but are not limited to: race, color, religion, sex, age, national origin, ancestry, sexual orientation, physical or mental handicap, veteran or other protected status. It may include physical contact such as touching or patting, written or verbal comments or suggestions, obscene or offensive jokes or pictures, hostile or threatening gestures, or other forms of degradation. Though harassment is often malicious in intent, even thoughtless or unpremeditated behavior can have the effect of harassment. In any situation where there is an inherent balance of power between the parties, romantic and/or sexual relationships are strongly discouraged.

For purposes of this policy, sexual harassment is defined as any type of sexually oriented conduct, whether intentional or not, that is unwelcome and has the purpose or effect of creating a work environment that is hostile, offensive or coercive to a reasonable woman or man, as the case may be. The following are examples of conduct that, depending on the circumstances may constitute sexual harassment:
a) unwelcome and unwanted sexual jokes, language, epithets, advances or propositions;
b) written or oral abuse of a sexual nature, sexually degrading or vulgar words to describe an individual;
c) the display of sexually suggestive objects, pictures, posters, or cartoons;
d) unwelcome and unwanted comments about an individual's body, sexual prowess or sexual deficiencies;
e) asking questions about sexual conduct;
f) unwelcome touching, leering, whistling, brushing against the body, or suggestive insulting or obscene comments or gestures;
g) demanding sexual favors in exchange for favorable reviews, assignments, promotions, or continued employment, or promises of the same.
If you believe that you have been the subject of sexual harassment or subjected to a hostile, offensive or coercive environment, or if you are not sure whether certain behavior is sexual harassment or whether it is actionable under this policy, you are strongly encouraged to immediately notify your supervisor or manager.
You may also notify the following:
Donna Wrenn, Director of Human Resources
P.O. Box HR, O'Kane 72, Ext. 3391

William J. Conley, Director of Administrative Services/Affirmative Action Officer PO Box HR, O’Kane 72, Ext. 3423
You may file an Informal or Formal Complaint with the following individuals (depending on the status of the alleged harasser):
For Complaints Against Students:
Jacqueline D. Peterson, Vice President for Student Affairs
PO Box 19A, Hogan 115, Ext. 2414
For Complaints Against Teaching Faculty:
Dr. Stephen Ainlay, Dean of the College
PO Box DEAN, Fenwick 115, Ext. 2541
For Complaints Against Administrators In:
Admissions
Dr. Frank Vellaccio, Senior Vice President
PO Box SVP, Fenwick 111 Ext. 3010
Athletics
Mr. Richard M. Regan Jr., Director of Athletics
PO Box A Fieldhouse, Ext. 2582
Administration and Finance
Mr. Michael L.Lochhead Vice President Administration and Finance
PO Box VPFIN, O'Kane 158, Ext. 2327
Chaplains' Office
Ms. Katherine M. McElaney, Director of the College Chaplains
PO Box 16A, Hogan 314, Ext. 2448
CISS
Dr. Stephen Ainlay, Dean of the College

PO Box DEAN, Fenwick 115, Ext. 2541
Development
Dr. Frank Vellaccio, Senior Vice President
PO Box SVP, Fenwick 111, Ext. 3010
Financial Aid
Dr. Frank Vellaccio, Senior Vice President
PO Box SVP, Fenwick 111, Ext. 3010
Library
Dr. Stephen Ainlay, Dean of the College
PO Box DEAN, Fenwick 115, Ext. 2541
Public Affairs
Dr. Frank Vellaccio, Senior Vice President
PO Box SVP, Fenwick 111, Ext. 3010
Registrar
Dr. Stephen Ainlay, Dean of the College
PO Box DEAN, Fenwick 115, Ext. 2541
Student Life
Dr. Jacqueline D. Peterson, Vice President for Student Affairs
PO Box 19A, Hogan 115, Ext. 2414
For Complaints Against Nonexempt Personnel:
Mr. William J. Conley, Director of Administrative Services/Affirmative Action Officer PO Box HR, O'Kane 72, Ext. 3423

Employees may also contact:
Massachusetts Commission Against Discrimination
One Ashburton Place, 6th floor
Boston, MA 02108
(617) 727-3990

Equal Employment Opportunity Commission
One Congress Street, 10th floor
Boston, MA 02114-2023
(617) 565-3200

## Clery Act Statement

Holy Cross is committed to assisting all members of the Holy Cross community in providing for their safety and security. Information regarding campus safety and security including crime prevention, public safety law enforcement authority, crime-reporting policies, crime statistics for the most recent three-year period, and disciplinary procedures is available upon request. If you would like a brochure containing this information, please contact the Public Safety Department at Holy Cross, 1 College Street, Worcester, MA 01610-2395, or telephone (508) 793-2224.

## Bequests

Gifts by will to Holy Cross are essential to the future of the College. The unrestricted gift is the most useful and effective since it can be allocated where the need is the greatest. However, a gift for a specific purpose is also vital and may take the form of endowed chairs, named scholarships, buildings, books for the library, research equipment, works of art and the like. The following suggested forms for a bequest to the College of the Holy Cross should be adapted or rewritten by legal counsel to fit the donor's individual situation.

## Legal Forms of Bequest

Unrestricted General Legacy. I bequeath to The Trustees of the College of the Holy Cross, a corporation existing under the laws of the Commonwealth of Massachusetts and located in Worcester, Massachusetts, the sum of (insert dollar amount) for its general purposes.
Gift for Specific Purpose. I bequeath to The Trustees of the College of the Holy Cross, a corporation existing under the laws of the Commonwealth of Massachusetts and located in Worcester, Massachusetts, the sum of (insert dollar amount) to be added to its endowment with the net income therefrom to be used for (insert specific purpose). If in the opinion of the College's Board of Trustees, the purposes of the College would be better served by using the income or principal, or both, for the College's general purposes, the income or principal, or both, may so be used.
Specific Legacy. I bequeath my (insert description of property) to The Trustees of the College of the Holy Cross, a corporation existing under the laws of the Commonwealth of Massachusetts and located in Worcester, Massachusetts.
Gift of Residuary Estate. I devise and bequeath the residue of the property owned by me at my death, real and personal and wherever situate, to The Trustees of the College of the Holy Cross, a corporation existing under the laws of the Commonwealth of Massachusetts and located in Worcester, Massachusetts, for its general purposes (or name a particular purpose).

## Consult your own attorney:

The provisions in your Will for making a gift to the College of the Holy Cross will depend upon the type of gift and your unique circumstances. We hope these specimen provisions will be helpful to your attorney.

The Office of Planned Giving at Holy Cross is available to answer questions you or your attorney might have. Please call (508) 793-2482.

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