College of the Holy Cross
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# 2000-2001 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 long-standing 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.


Cover photo by Christopher Navin

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## Academic Calendar 2000-2001

## Fall 2000 Semester

| Saturday | August 26 |
| :--- | :--- |
| Sunday |  |
| Monday | August 27 |
|  | August 28 |
|  |  |
| Tuesday | August 29 |
| Monday | September 4 |
| Monday | October 9 |
| Tuesday | October 10 |
| Tuesday | November 21 |
| Monday | November 27 |
| Tuesday | December 5 |
| Friday | December 8 |
| Friday | December 15 |

## Spring 2001 Semester

| Monday | January 15 |
| :--- | :--- |
|  |  |
| Monday | January 15 |
| Tuesday | January 16 |
| Friday | March 2 |
| Monday | March 12 |
| Wednesday | April 11 |
| Tuesday | April 17 |
| Tuesday | May 1 |
| Friday | May 4 |
| Friday | May 11 |
| Thursday | May 24 |
| Friday | May 25 |

1:00 p.m. - 4:30 p.m.
Add/drop for open courses
Martin Luther King Holiday.
Add/drop will be held.
CLASSES BEGIN
Spring vacation begins after last class
Classes resume
Easter recess begins after last class
Classes resume
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, excellent faculty, and the intelligence, imagination, and achievements of its students. It is also well-known 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 250 full- and part-time 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 leader among those institutions that aspire to excellence in undergraduate education. In recent years, its leadership has been demonstrated by:

- A $\$ 350,000$ grant from the Andrew W. Mellon Foundation to implement College-wide programs in information technology.
- A grant of $\$ 300,000$ from the Davis Educational Foundation to develop a multimedia website on the art holdings of Holy Cross and the Worcester Art Museum.
- Grants totaling $\$ 1.25$ million from IBM and the Andrew W. Mellon, W.M. Keck, 3M, Charles E. Culpeper, and Arthur Vining Davis Foundations to develop a state-of-the-art Multimedia Resource Center and a guided, self-paced foreign language instruction program.
- A Kraft-Hiatt Professorship in Comparative Religion to create an endowed chair in Judaic Studies at the College of the Holy Cross and in Christian Studies at Brandeis University, and to involve the two schools in joint academic activities designed to foster mutual understanding and respect among Christians and Jews.
- A grant of $\$ 900,000$ from the National Science Foundation for renovations to enhance chemistry laboratories that support faculty research and research training.
- A grant of $\$ 500,000$ from the Kresge Foundation for the purchase of new scientific instrumentation. As part of the award, Holy Cross has established a $\$ 2$ million endowment for the modernization, replacement, and repair of its scientific equipment.
- Three grants totaling $\$ 2.25$ million from the Howard Hughes Medical Institute to support: (1) stipends for Holy Cross students in summer science research programs; (2) instrumentation for the biological psychology concentration, the biochemistry concentration, and for courses in molecular biology; (3) advanced training for Holy Cross science faculty; (4) summer and yearlong retraining programs for science and mathematics teachers in the Worcester Public Schools; and (5) programs of science instruction for 6th, 7th, and 8th grade minority students from the Worcester Public Schools.

6 The College of the Holy Cross: Profile

- A grant of $\$ 443,000$ from the Sherman Fairchild Foundation to replace and upgrade laboratory equipment used in teaching introductory science courses for physics and biology majors and nonmajors.
- A $\$ 500,000$ challenge grant from the Davis Educational Foundation and a $\$ 400,000$ challenge grant from the Kresge Foundation for renovations to the Music Department and to convert Fenwick Chapel to the state-of-the-art John E. Brooks, S.J., Center for Music.
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, it has as its purpose the advancement of the Kingdom of God in His people. In the concrete, 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 half-finished 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, half of them men and half women. Few classes exceed an enrollment of 40 , and most average 22 . 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 nine 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.

## Affiliations

The College of the Holy Cross is a member of, or accredited by, the following educational institutions: American Academy of Religion, American Academy in Rome, American Association of Collegiate Registrars and Admissions Officers, American Association of Higher Education, American Association of University Women, American Conference of Academic Deans, American Council of Learned Societies, American Film Federation Society, Association of Jesuit Colleges and Universities, American Council on Education, American Mathematical Society, American School of Classical Studies of Athens, American School for Oriental Research, Association of American Colleges, Association of Independent Colleges and Universities in Massachusetts, College Entrance Examination Board, College Placement Council, Consortium of Supporting Institutions of the Hebrew Union College Biblical and Archaeological School of Jerusalem, Council for Advancement and Support of Higher Education, Educational Testing Service, Institute of European Studies, Mathematical Association of America, National Association of Schools of Theatre, National Association of Student Personnel Administrators, Catholic Education Association (National and New England), National Commission on Accrediting, New England Association of Schools and Colleges, Society for Scientific Study of Religion, Sigma Xi and the Colleges of Worcester Consortium. The Holy Cross Theatre Department is an accredited institutional member of the National Association of Schools of Theatre.

## The Academic Program

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

An assistant dean is assigned to each class, serving as its Class Dean. 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 at Holy Cross maintains, interprets, and communicates academic policy and procedures to students, faculty, and the public. Services include enrollment, registration, monitoring of academic and administrative policies related to the academic record, processing transcript requests, classroom management, and auditing of student progress toward degree completion. The office also verifies student enrollment for insurance companies, veterans 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 the Washington Semester and Semester Away programs through the Center for Interdisciplinary and Special Studies in the first semester of their fourth year.

Each student's curriculum consists of common requirements, a major, and freely elected courses.

## 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 social/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 world - i.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 ${ }^{3} \mathrm{a}$ 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 opportu-

Advanced Placement

| Subject |  | Score | Units | Placement | Distribution |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Biology |  | 5 | 1-1/4 | Yes | Natural Science |
|  |  | 4 | 1-1/4 | No | Natural Science |
| Classics |  | 5 | 1 | Yes | Literature |
|  |  | 4 | 1 | Yes | Literature |
|  |  | 3 | 0 | Yes | None |
| Economics | Micro | 5 | 1 | Yes | Social Science |
|  |  | 4 | 1 | Yes | Social Science |
|  |  | 3 | 1 | Yes | Social Science |
|  | Масто | 5 | 1 | Yes | Social Science |
|  |  | 4 | 1 | Yes | Social Science |
|  |  | 3 | 1 | Yes | Social Science |
|  | Statistics | 5 | 1 | Yes | Mathematical Science |
|  |  | 4 | 1 | Yes | Marhematical Science |
|  |  | 3 | 1 | Yes | Mathematical Science |
| English | Literature | 5 | 1 | No | Literature |
|  |  | 4 | 1 | No | Literature |
|  | Language \& Composition | 5 | 1 | No | None |
|  |  | 4 | 1 | No | None |
| History |  | 5 | 2 | Yes | Historical Studies |
|  |  | 4 | 2 | Yes | Historical Studies |
| Mathematics <br> Only one exam may receive credit | AB Exam | 5 | 1 | Yes | Mathematical Science |
|  |  | 4 | 1 | Yes | Mathematical Science |
|  |  | 3 | 1 | Yes | Mathematical Science |
|  | BC Exam | 5 | 2 | Yes | Mathematical Science |
|  |  | 4 | 2 | Yes | Mathematical Science |
|  |  | 3 | 2 | Yes | Mathematical Science |
| Computer Science <br> Only ore exam may receive credit | A Exam | 5 | 1 | Yes | Mathematical Science |
|  |  | 4 | 1 | Yes | Mathematical Science |
|  |  | 3 | , | Yes | Mathematical Science |
|  | AB Exam | 5 | 2 | Yes | Mathematical Science |
|  |  | 4 | 2 | Yes | Mathematical Science |
|  |  | 3 | 1 | Yes | Mathematical Science |
| Modern <br> Languages | Languge | 5 | 1 | Yes | Language Studies |
|  |  | 4 | 1 | Yes | Language Studies |
|  |  | 3 | 0 | Yes | None |
|  | Liecrature | 5 | 1 | Yes | Literature or Language Studies |
|  |  | 4 | 1 | Yes | Literature or Language Studies |
|  |  | 3 | 0 | Yes | None |
| Physics <br> B Exam may not be used in conjunction with C Exams | B Exam | 5 | 1 | No | Natural Science |
|  |  | 4 | 1 | No | Natural Science |
|  | C Exam Mechanics | 5 | 1 | Yes | Natural Science |
|  |  | 4 | 1 | No | Natural Science |
|  | C Exam <br> Elecricity ${ }^{\circ}$ M Magnetism | 5 | 1 | Yes | Natural Science |
|  |  | 4 | 1 | No | Natural Science |
| Political | American Politics and Goverment | 5 | 1 | Yes | Social Science |
| Science | Comparative Politics and Govemment | 5 | 1 | Yes | Social Science |
| Visual Arts |  | 5 | 0 | Yes | None |

nity 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 prob-lem-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.

## Language Requirement for the Classes of 2001, 2002, and 2003

Students in the Classes of 2001, 2002, and 2003 must demonstrate competence in a classical language, a modern foreign language, or American Sign Language. Competence is demonstrated in one of the following ways: scoring 600 or higher on an SAT II Subject Test in a foreign language, getting a 3 or better in an Advanced Placement Test, passing one of the qualifying examinations administered each semester by the Departments of Classics and Modern Languages and Literatures, or successfully completing the second semester of an intermediate-level language course while at Holy Cross. Students who intend to satisfy the language requirement by studying a language at Holy Cross are urged to complete the necessary coursework early in their academic program. Students should plan to satisfy the language requirement by the end of their second year.

## Majors

Students must fulfill the requirements of a major which must be declared before the preregistration 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.

The following majors qualify for the Bachelor of Arts degree: biology, chemistry, classics, economics, economics-accounting, English, French, German, history, Italian, mathematics, music, philosophy, physics, political science, psychology, religious studies, Russian, sociology, sociologyanthropology, Spanish, studies in European literature, 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.

## Free 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 free-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.

## 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 preregistration 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 registration during the semester the student returns to campus. Students with double-major status are restricted to taking the minimum number of courses necessary to complete each major, or 10 courses in each major, whichever is higher.

## Minors

Minors are available in anthropology, chemistry, computer science, economics, economics-accounting, German, 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 Advanced Placement Program of the College Board. Each academic department establishes criteria for awarding placement and credit. Placement and credit awards for 2000-2001 are listed on page 10.

## 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 satisfy degree requirements of the College or College-sponsored academic programs. 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 appropriate Department Chair at Holy Cross.

A maximum of eight semester courses will be accepted in transfer for the incoming first-year student. At the student's request these may be used to advance standing up to a maximum of two semesters. Students with transfer credit may also have the opportunity to elect upper-division courses at the discretion of the Department Chair.

## 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 and Advanced Placement 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 through the Office of the Class Dean. A final decision in the matter of early graduation rests with the Dean of the College.

## Transfer Courses

Courses taken 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 require-
ments; or 2) if they satisfy requirements for College-sponsored academic programs, that is, if they satisfy requirements for minors, concentrations, or the premedical program.

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 appropriate Department Chair.
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.

## 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. Advising continues throughout the four years although the advisor may change, depending on the student's needs and the needs of the major department. Academic Services \& Learning Resources provides additional academic advising for students across the College.

## Registration

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

Preregistration for courses takes place in the preceding semester. Registration takes place during the first week of classes each semester. Late registration and changes of course schedule are permitted during the period designated by the Registrar. First-year students are permitted to change courses in the registration period of the fall semester only with the approval of the Class Dean. 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 registration, 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 officially 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 event. To obtain an excused absence, students should notify the appropriate Class Dean, who will verify the grounds for the excused absence. Verification can be provided, with the student's permission, by the 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

The College of the Holy Cross is committed to creating an intellectual community in which all members participate in the free and uncompromising pursuit of truth. This is possible only in an atmosphere of mutual trust where the discovery and communication of truth are marked by scrupulous, unqualified honesty. Any violation of academic integrity wounds the whole community and undermines the trust upon which the communication of knowledge and truth depends. The principal violations of academic integrity are cheating, plagiarism, and collusion.

Cheating is the use or attempted use or improper possession of unauthorized aids in any examination or other academic exercise submitted for evaluation. This includes data falsification, the fabrication of data, or deceifful alteration of collected data included in a report.

Plagiarism is the deliberate 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.

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 the student, independent of the faculty member's responsibility, to familiarize him-or herself with the details of how plagiarism is to be avoided, and the proper forms for quoting, summarizing, and paraphrasing, presented in standard handbooks (for example, The Little Brown Handbook and the Harbrace College Handbook).

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 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 report the incident in writing to the Chair of the department and the Class Dean within a week of the instance. 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 request for a formal review must be written and submitted 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. The Chair of the department of the faculty member involved shall receive a copy of the student's written statement from the Class Dean. By the end of two weeks the Chair of the department and the Class Dean will investigate the charge and review the student's statement, meeting separately with the student and the faculty member involved.

If, after this review, the faculty member remains convinced that the student is guilty of academic dishonesty, within one week of the review of the student's request, he or she shall administer a zero for that assignment and his or her 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. The Class Dean shall inform the student promptly of the decision made.

A second offense against academic honesty, which may be reviewed as described above, will result in dismissal from the College. Students dismissed for reasons of academic dishonesty may
appeal their dismissal to the Committee on Academic Standing, as described in a subsequent section.

## Written Expression

All of us, students and teachers 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. We ought, therefore, to take special care to encourage excellence in writing, both in our own work and in the work of our students.

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-the-semester 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 is determined by mutual agreement. Alternatively, students may request an absentee examination. An absentee examination, is scheduled by the Registrar and 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 the first Friday or Saturday of the examination period, and a faculty member finds it impossible to reach campus to administer a final examination, the examination will be held on Sunday at the time originally scheduled and in the room originally assigned. If a severe
storm occurs on any day from Monday through Friday of the following week and a faculty member finds it impossible to reach campus to administer a final examination, the examination will be held on Saturday at the time originally scheduled and in the room originally assigned. Please note that the College will not close or postpone scheduled examinations unless the Governor declares an 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 take the missed examination on the regularly scheduled absentee examination day which is the last Friday 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 other than the grade point multiplier defined below.

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 |  | Excellent |
| 3.70 | A |  |
| 3.30 | $\mathrm{~A}-$ |  |
| 3.00 | $\mathrm{~B}+$ | Good |
| 2.70 | B |  |
| 2.30 | $\mathrm{~B}-$ |  |
| 2.00 | $\mathrm{C}+$ |  |
| 1.70 | C |  |
| 1.30 | C |  |
| 1.00 | $\mathrm{D}+$ | Low Pass |
| 0.00 | D | Failure |
|  | F | In Progress |
|  | IP | Withdrawal without Prejudice |
|  | W | Audit |
|  | AU | Absence from Final Examinations |
|  | AB | Incomplete |
|  | I | Pass |
|  | P | No Pass (Failure) |
|  | NP | Grade not submitted |

The grade $A B$ is changed to $F$ unless the absentee examination is taken at the time appointed by the Registrar. The grade of $I$ becomes an $F$ unless a subsequent grade is submitted to the Registrar within one week of the last day of final examinations. Exceptions to these regulations will be granted only by the appropriate Class Dean, and only upon written petition by the faculty member, or after consultation with the faculty member if, as in the case of illness, the Class Dean initiates the request.

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 and the Colleges of Worcester Consortium are calculated into a student's grade point average.

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.

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 appropriate 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 student, 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. Registration for a fifth course takes place only after all students have been preregistered for the normal four-course program.
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

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 Office of the Registrar must be completed and filed with that office during the period designated for the declaration of the Pass/No Pass option.
2. The teacher involved will know the names of all students who have registered for a course on a Pass/No Pass basis. The grades P or NP will be assigned to the students by the teacher.
3. Pass/No Pass courses do not count toward the 32 courses required for graduation.
4. Pass/No Pass courses can not be used to remove deficiencies.
5. Courses taken on a Pass/No Pass basis may be used to satisfy common requirements.
6. Pass/No Pass courses may be taken within the student's major field but can not be used to fulfill the requirements of a major.
7. Pass/No Pass grades will not be averaged into a student's GPA but will be placed on the student's record.
8. 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 registered in four other courses for credit in a semester. They must fill out the official audit form in the Registrar's Office by the end of the registration period. 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

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

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

The following rules delineate the 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.

## Removal of Deficiency

. A deficiency may be removed by Advanced Placement credit, a grade of C or better earned in a course taken at another institution approved by the appropriate Department Chair, or by enrollment in a fifth course for a letter grade. 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 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.

Course failures will contribute to an academic suspension as outlined above, even though the deficiencies may have been removed by the transfer of credit from another institution or the use of Advanced Placement credits.

A first suspension is for one academic year. After the one-year suspension, readmission is automatic, contingent upon receipt by the Class Dean of a written request for readmission.

A second suspension results in academic dismissal, which is ordinarily considered final separation from the College.

A student will also be dismissed for a second instance of academic dishonesty.
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.

## 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. All materials for readmission (a letter requesting readmission, letters of recommendation, transcripts of all intervening work, statements of good standing, and other substantiating documents that the Class Dean may require) 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. A student on Leave, upon written notification to the appropriate Class Dean of his or her intent to return to the College, 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 postponements from the Class Dean. The Class Dean makes a decision about the request which may include conditions which 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 reenrollment 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 reenrollment. 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

(Consult the Student Handbook for complete descriptions and academic requirements.)
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.
Alpha Sigma Nu - an international honor society with chapters in Jesuit colleges and universities throughout the world, which honors students who distinguish themselves in scholarship, loyalty and service.
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 Beta Kappa - the national honor society of liberal arts and sciences, whose members are elected from the third and fourth-year classes primarily on the basis of broad cultural interests, scholarly achievement and good character.
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 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.
Theata 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

(Consult the Student Handbook for more thorough descriptions.)

## Fourth-Year Competition

The George J. Allen, Ph.D., '65 Psychology Award is given to a graduating psychology major who best exemplifies the integration of empirical scientific research and community service.
The American Institute of Chemists Foundation Award is given to an outstanding fourth-year student for a demonstrated record of ability, leadership, and professional promise.
The Pedro Arrupe Medal and Prize for Outstanding Service, 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 Beethoven Prize, awarded to a fourth-year student for the best historical or analytical essay on music or for an original composition.
The Joseph C. Cahill Fund, awarded to a graduating chemistry major for excellence in chemistry.
The Frank D. Comerford Medal for excellence in public speaking.

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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 for proficiency in philosophy.
The Rev. John W. Flavin, S.J., Award in Biology, presented to a fourth-year biology major for excellence in scientific achievement, significant humanitarian service, or contribution to the vitality of the Biology Department and the College.
The Dr. Marianthi Georgoudi Memorial Award to the outstanding psychology fourth-year student 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 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 for the best essay on a subject in religion.
The Rev. Robert F. Healey, S.J., Prize is awarded by the Classics Department to a fourth-year major who has attained a high degree of proficiency in the study of Ancient Greek.
The Holy Cross Club of Worcester Prize for outstanding scholastic achievement by a Worcesterarea fourth-year student.
The Thomas P. Imse Alpha Kappa Delta Award 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 for general excellence in chemistry throughout the bachelor of arts premedical course.
The Rev. George A. King, S.J., Richard J. Keenan Memorial Award for proficiency in political science.
The John C. Lawlor Athletic Medal for the best student and athlete throughout the college course.
The Leonard Award for proficiency in oratory, debating or like competition. The award is given to the valedictorian of the graduating class.
The Heather C. Lochmuller '98 Award is given to a fourth-year chemistry major for outstanding service to the Chemistry Department.
The Gertrude McBrien Mathematics Prize for proficiency in mathematics.
The George B. Moran Award for scholarship and leadership in school activities.
The Nugent Gold Medal for general excellence in physics.
The John L. Philip Memorial Sign Language Award is given to a graduating student who has demonstrated an interest in, and motivation to learn, American Sign Language (ASL), and has endeavored to bring that language to life. The student has integrated his/her classroom knowledge of ASL and Deaf Culture with a 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.
Study Abroad Independent Project Prize - The Independent Project is an integral component of the Holy Cross Study Abroad experience. It provides students with the opportunity to pursue some special interest in the local culture, whether it be history, language, folklore and crafts, religion, arts, social institutions or practices, cuisine, popular culture or the scientific study of local flora and fauna. The award is given for initiative, seriousness of purpose, and the excellence of a Study Abroad Independent Project.
The VanHook-Vidulich Award is given to a senior for an excellent research thesis and presentation.
The Maurizio Vannicelli Prize in Italian Studies was established in memory of Professor

Vannicelli, professor of political science at Holy Cross. The prize, a gift of an anonymous 1991 alum, is given for the best essay on a theme in Italian literature or culture.
The Vannicelli Washington Semester Program Award is given for the best thesis in the Washington Semester Program.
The Varsity Club Norton Prize or Medal for an outstanding athlete.
The Wall Street Journal Student Achievement Award to honor the student who has contributed most significantly in scholarship, enthusiasm, and/or service to the Economics Department.
The Women's Studies Award in recognition of excellence in Women's Studies, the development and articulation of a feminist critical consciousness, and the ability to integrate and reflect on issues of pressing concern to women.
The Carter G. Woodson Prize to a fourth-year student of African-American Studies for outstanding scholarly or artistic achievement in African-American Studies.

## Third-Year Competition

The Thomas A. Fulham Environmental Studies Prize to a third-year student in recognition of his or her work in safeguarding our physical environment.
The John D. O'Connell/Arthur Anderson Prize for Accounting Excellence. Established in 1994 to honor the distinguished service of the College's pre-eminent accounting professor. This award honors a third-year student for continuing the traditions associated with Professor John D. 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 for a third-year student who makes an outstanding contribution to the quality of intellectual life.

## Second-Year Competition

The Teresa A. Churilla Second-Year Book Award in Biology 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 Medal for the highest-ranking student in the second-year class.

## First-Year and Second-Year Student Competition

## The Joseph J. O'Connor Purse for debating.

## First-Year Competition

The Ernest A. Golia, M.D., Book Award to a non-major first-year student for excellent performance in a Classics course.

## Competition for All Students

..The Academy of American Poets Prize for the best poem or group of poems submitted to the English Department.
The Elias Atamian Family Book Award to a student who has excelled in Middle Eastern Studies. The Bellarmine Gold Medal for the best historical essay on Colonial America.
The Bourgeois French Prize for the best essay submitted during the academic year on a subject relating to the culture and history of the French and their descendants in the United States.
The Nellie M. Bransfield Award for excellence in elocution among the undergraduates.
The Crompton Gold Medal for the best scientific essay or research paper submitted during the school year. Awarded on a rotating basis among the departments of biology, chemistry and physics. The John J. Crowley Purse for the best essay on a religious, literary, historical, economic or scientific subject.
The Patrick F. Crowley Purse for proficiency in oratory and debating.

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The John J. Cummings, Jr./BAI Award for the best student essay or research paper submitted annually on a subject relating to financial institutions.
The DeValera Purse for the best essay on a subject taken from Irish history.
The Fallon Debating Purse founded in 1901 by the Rev. John J. Fallon of the class of 1880.
The Flaherty Gold Medal for the best historical essay submitted during the academic year on a subject selected by the faculty.
The Edna Dwyer Grzebien Prize for a student proficient in modern languages.
The Walter Gordon Howe Award for excellence in percussion performance.
The Monsignor Kavanagh Medal and Award for the best original essay on some phase of Catholic art or Christian archeology.
The William E. Leahy Award in memory of William E. Leahy of the class of 1907, to the outstanding debater in the B.J.F. Debating Society.
The Markham Memorial Prize, in memory of James and Honora Hickey Markham, is a medal and a cash award for the best essay in a competition administered by the Department of Philosophy.
The Leonard J. McCarthy, S.J., Memorial Prize for the best essay in the criticism of English or American Literature.
The McMahon Historical Prizes for the best essays on the history of the Catholic Church in New England.
The Purple Purse for the student contributing the best short story to The Purple.
The James H. Reilly Memorial Purse for the student contributing the best poem or short story to The Purple.
The Freeman M. Saltus Prize for excellence in writing essays on labor or economics.
The Strain Gold Medal for the best essay submitted during the academic year on a subject taken from the field of philosophy.

## Prestigious Awards

The Committee on Graduate Studies and Fellowships advises students applying for various prestigious awards to support post-graduate study (Beinecke, Fulbright, Goldwater, Howard Hughes, Javits, Marshall, Mellon, National Science Foundation, Rhodes, Rotary, St. Andrews Society, Truman, and Watson). 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 year, all incoming students are invited to join the College's First-Year Program. Approximately 25 percent of the first-year class participates in the FYP. The program offers special seminars, common readings, and three to four extracurricular events that all FYP faculty and students agree to attend. FYP students enroll in one year-long seminar and three regular College courses. Since all FYP members live in the same residence hall for the year, students themselves often initiate special residence-hall discussions and co-curricular events.

Each year, the FYP courses, along with co-curricular activities, are shaped around a different question; in 2000-2001, it is: "In a culture of the here and now, how then shall we live?" Faculty from various disciplines teach the small FYP classes (approximately 15 students) which respond to the common theme. Professors not only introduce students to their academic disciplines, but also discuss in the classroom those events and readings that all participants share.

Students are admitted to the FYP solely on the basis of their interest in the program.

## 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, New England Science Center, Old Sturbridge Village, Worcester Art Museum, Worcester Foundation for Experimental Biology, Worcester Historical Society, and the Worcester County Horticultural Society.

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. Written application for this approval is filed in 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 six 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, Swarthmore College, Vassar College, and Wesleyan University. Four programs, described below, are available through the Venture Consortium. Details and applications are available from the Class Dean and the Career Planning Office.

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. Recent placements have included positions in the media, environmental agencies, social services, investment corporations, parks and recreation, public relations, social and medical research, preschool and elementary education, and many more. This program affords students financial independence during the time of their leave from undergraduate study and an opportunity to explore career areas.

Venture II: The Venture Consortium assists graduating students in finding entry-level positions in the nonprofit sector through the Venture II program. These positions are appropriate for students who are interested in establishing careers in nonprofit organizations, students who wish to explore the nonprofit sector as a career option before making a commitment, and those who would like to postpone graduate study. The bank of jobs maintained by the Consortium is extensive, updated regularly, and includes positions both in the United States and abroad.

Venture's Boston Summer: This program is available for students entering their third and fourth year. It affords students the opportunity for paid internships in the city of Boston combined with a series of events and workshops for program participants. Students accepted into the program also receive leads on housing and information about the Boston area.

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 East Harlem 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.

## 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, Ireland, Italy, Japan, Mexico, Peru, Russia, Scotland and Spain. 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 field work, these projects provide students an opportunity to interact closely with the people and political, economic and cultural institutions of their host country.

## Preparation for Graduate Study

Most students continue their studies beyond college. Many choose professional studies in medicine, law, business, and other specialized fields; others pursue academic degrees in various areas of graduate study. More than half the students in recent classes began some form of graduate or professional study, within a year or two after graduation. The Office of Graduate Studies Advisor maintains a library of information about graduate and professional studies, including the catalogs of many American and foreign graduate programs. The Graduate Studies Advisor is available to inform students about the Graduate Record Examination, and special fellowship and scholarship competitions, and to facilitate the process of application. Within each of the academic departments, one faculty member is designated as the advisor or resource person concerning graduate study in that area. 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 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 which 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

In accordance with the current recommendations of law school faculties, Holy Cross encourages prelaw students to choose any major that suits their talents and interests. While there is no established prelaw curriculum, students are urged to include in their four years courses that develop the following skills: reading comprehension, oral and written expression, critical understanding of the human institutions and values with which the law deals, and creative thinking. Perhaps the most important skill for prelaw students is the effective command of oral and written English. To this end courses with emphases on language composition and rhetoric are strongly recommended. At the same time, any course that trains the student to observe accurately and think objectively is invaluable. For details of law school admission as well as advice on general questions, the Prelaw Advisor should be consulted.

## For Students Interested in Teacher Certification

Holy Cross has a program leading to Massachusetts state certification as a secondary-school teacher in the subject areas of biology, chemistry, English, French, history, Latin, mathematics, physics, and Spanish when completing a liberal arts degree in same academic area. A program leading to a social studies certificate can be achieved by majoring in economics, philosophy, political science, psychology, religion, sociology, or sociology-anthropology.

The program requires three 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). There are also two prepracticum experiences of 40 hours each prior to the fourth-year practicum. Both prepractica 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 Certification Program for further information.

## For Students Interested in Graduate Schools of Business and Management

Experience has shown that a sound, rigorous liberal arts program is an excellent preparation for graduate schools of business and management. The student may major in virtually any field. Discussion with several graduate schools of business and management indicates that it is strongly advisable that a liberal arts student have, in addition to the major, one and preferably two years of economics, a course in accounting, one year in differential and integral calculus, plus a year, if possible, in applied mathematics. At least an introductory computing course is strongly recommended. The student should have developed an in-depth ability to use the English language in its written and spoken forms. While business and management schools usually do not stipulate these courses as actual requirements, they recognize them as strongly desirable.

## The Five-Year BA/Master in Business Administration or BA/Master in Health Administration Option

Students may elect to participate in the Five-Year BA/MBA Program or the Five-Year BA/MHA Program jointly sponsored by Holy Cross and the Clark University Graduate School of Management. These programs make it possible to complete both the BA and MA degrees in five rather than six years. Ideally suited for economics and economics-accounting majors, the BA/MBA and the BA/MHA programs are open to all Holy Cross students.

The programs allow students to take a fifth course, tuition free, at Clark University in each semester of the third and fourth years. These courses may be applied to the MBA or MHA. In addition, as many as seven of the 19 courses required for the MBA or the MHA can be satisfied by elective courses taken during the four years at Holy Cross.

Students take the GMAT examination and apply for admission to Clark's Graduate School of Management in their third year at Holy Cross. Upon graduation, students accepted into the graduate program complete the degree requirements at Clark University. At Clark, students may choose a course of general study or may concentrate in a number of attractive specialties, including Health Care Management, Accounting, and International Management.

Additional information may be obtained from the Five-Year Program Advisor at Holy Cross.

## The 3-2 Program in Engineering

Holy Cross offers a cooperative, five-year, dual-degree program for students who are interested in combining the liberal arts and sciences with engineering. Students enrolled in this program spend three years as full-time students at Holy Cross and two years as full-time students at Columbia University in New York City, Washington University in St. Louis, or Dartmouth College in Hanover, New Hampshire.

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 properly prepare for the engineering courses.

Any student who fulfills these requirements with a B average is guaranteed admission to Columbia University or Washington University. Dartmouth does not guarantee admission to its program, but all qualified students have been accepted in the past. 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. Both Columbia and Washington University have financial aid policies 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.

## 32 The Center for Interdisciplinary and Special Studies

# The Center for Interdisciplinary and Special Studies 

Gary P. DeAngelis, Ph.D., Associate Director
Susan Cunningham, Ph.D., Associate Director
Richard E. Matlak, Ph.D., Director, College Honors Program
Bertram D. Ashe, Ph.D., Director, African American Studies
Aldo Lauria-Santiago, Ph.D., Director, International Studies
Predrag Cicovacki, Ph.D., Director, Peace and Conflict Studies
Amy Wolfson, Ph.D., Director, Women's Studies
Edward H. Thompson Jr., Ph.D., Director, Gerontology Studies Program
Judy Freedman Fask, M.Ed., Coordinator, American Sign Language and Deaf Studies
Kevin J. Fleese, M.A., Lecturer, American Sign Language and Deaf Studies
Founded in 1971, the Center for Interdisciplinary and Special Studies is responsible for promoting interdisciplinary teaching and scholarship 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 four categories: 1) interdisciplinary academic concentrations which complement departmental majors and help students address important contemporary issues with the methods and perspectives of multiple disciplines; 2) special programs which offer students and faculty opportunities to teach and study selected topics based on an interdisciplinary approach; 3) off-campus educational opportunities which link learning and living, combining rigorous academic course work with community-based internship and service opportunities; and 4) student-designed programs which reward student initiative with unique course work and independent research opportunities.

## Concentrations

The Concentrations 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 African American Studies, International Studies, Peace and Conflict Studies, and Women's Studies enable students to take five or six 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 encouraged to apply to be concentrators before the end of their third year. Concentration-related courses are also available through the Worcester Consortium.

## African American Studies

The African American Studies Concentration offers students an academic and experiential program in African American, Caribbean, and African subjects. 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.

## International Studies

As students prepare themselves for the complex international, interdependent world where they will spend their lives, International Studies offers students a broad avenue for discovering the cultures, histories, and languages of the world. Students concentrating in International Studies focus their courses in one particular area, such as regional studies in Africa, Asia, Latin America, the Middle East, and Russia/Eastern Europe.

African Studies offers courses on the major trends and developments during Africa's precolonial, colonial, and post-colonial periods.

Asian Studies offers courses focusing on different regions of Asia, spanning the disciplines of economics, history, anthropology, language and literature, music, religious studies, and theater.

Latin American Studies offers students an interdisciplinary array of courses, focusing on the multiplicity of peoples and cultures in central and south America, exploring the diversity of regions and countries as well as their common cultural and historical backgrounds.

Middle Eastern Studies focuses on historical developments, political systems, cultural traditions, and religious diversity. It analyzes domestic as well as foreign policy issues.

Russian/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.

International Studies concentrators all pursue regular majors and take the concentration as an interdisciplinary supplemental experience. Holy Cross offers a full range of modern language instruction; especially relevant to concentrators in International Studies is course work in Spanish, Chinese, and Russian. All students concentrating in International Studies complete a minimum of six courses from diverse disciplines. International Studies sponsors a wide array of co-curricular programs each semester, from guest lectures to panel discussions, films, and slide shows. Participation in these events is an integral part of completing academic work in International Studies.

## Peace and Conflict Studies

The Concentration in Peace and Conflict Studies is an interdisciplinary 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 an introductory, team-taught course and three elective courses, as well as to complete a capstone project. The choice of electives and projects arises from the student's interests and major. The program provides students the opportunity to develop the knowledge and skills for effective citizenship in the post-cold war world.

This program sponsors the Spring Forum on War and Peace, an annual series of public panels of faculty and students addressing such topics as common security, conflict resolution, and sustainable development. These panels also encourage students to address their own personal responsibility in the quest for human dignity.

## Women's Studies

The Women's Studies Concentration offers students an opportunity for the interdisciplinary study of women's experiences as it is 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 Studies is transforming thought about women, men, and society.

A concentration in Women's Studies 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 three 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 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 pressing concern to women.

## Special Programs

## 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 experts in integrative teaching and scholarship.

Beginning in 2000-2001, students will enter the Honors Program as second-term sophomores, after a rigorous selection process. A common course for sophomores consisting of plenary and seminar sessions will be co-taught by faculty in the natural sciences, social sciences, and humanities and arts. Students will 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 level 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 the best students of the College. The senior year culminates with the honors class presenting its research publicly to the College community at the Senior Honors Conference.

Those interested in learning more about the program, such as reading about the kind of theses students have recently done, should turn to the program's Web site under Departments and Programs of the College.

## 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 and Deaf Studies curriculum. The program offers students four semesters of American Sign Language instruction (ASL I, II, III, IV), 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, students have many opportunities to be actively involved in communitybased volunteer programs which provide personal and direct interaction with members of the Deaf community. Students can fulfill their College language requirement by completing two ASL language semesters. Students can also choose to create a student-designed multidisciplinary minor in ASL/Deaf Studies by integrating their ASL courses with courses in one or more disciplines.

## 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 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.

## 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.

## 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.

## 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.

## 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 Committre on Interdisciplinary and Special Studies together with the President, the Provost and the Dean of the College select 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 complete his or her 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.

## 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 interdisciplinary concentrations described above. The Committee on Interdisciplinary and Special Studies approves, monitors and administers all studentdesigned 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 (see below).

## Student-designed Multidisciplinary Majors

A multidisciplinary major must involve at least two disciplines and fall within the competence of the College faculty. The students may present a written proposal demonstrating a coherent progression of study for the multidisciplinary major during their sophomore year and no later than the end of September in their third year. The proposal must include a statement of intellectual rationale for the proposed field of study, an outline of courses already taken, and a 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. Faculty sponsors provide letters of support assessing the program of study. If the plan is approved, the faculty sponsors and the CISS Director will serve as an advisory committee responsible for approving changes in the major plan and giving guidance to the student undertaking the program.

Asian Studies: Students may plan an interdisciplinary major that is either regionally defined focusing for example on the history, language, arts and cultures of East, South or Southest 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.

German Studies: Students may 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 multi-faceted 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.

## >Student-designed Multidisciplinary Minors

A multidisciplinary minor must also involve at least two disciplines and fall within the competence of the College faculty. Admission to this program requires a proposal similar, albeit modified, to that for the multidisciplinary major. Students may design their minor from scratch, or use a facultydesigned template as a basis for their course work and study. At the current time, there are two such templates.

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.

Medieval and Renaissance Studies: Students may focus a program of study on the cultural and political life of the premodern 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.

## 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 in the United States or Canada. 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 an Historically Black College or University. Proposals for the Semester Away Program should be submitted no later than two weeks prior to the preregistration period during which a student plans to be away from the College.

## Student Grant Program

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

## Biology

Robert I. Bertin, Ph.D., Professor and Chair
William R. Healy, Ph.D., Professor
George R. Hoffmann, Ph.D., Anthony and Renee Marlon Professor in the Sciences, Professor
Mary Lee S. Ledbetter, Ph.D., Professor
Kornath Madhavan, Ph.D., Professor
Susan L. Berman, Ph.D., Associate Professor
Mary E. Morton, Ph.D., Charles A. Dana Faculty Fellow, Associate Professor, Associate Dean
Peter Parsons, Ph.D., Associate Professor
Kenneth N. Prestwich, Ph.D., Associate Professor
Brian C.L. Shelley, Ph.D., Assistant Professor
Madeline Vargas, Ph.D., Assistant Professor
Peter J. Lemay, M.S., Senior Laboratory Supervisor
Paul L. Lyons, M.S., Laboratory Supervisor
Catherine M. Dumas, M.S., Associate 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 also 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 nonmajors to basic biological concepts and explore the implications of modern biology for various social and philosophical issues.

Biology majors are required to take Biology 131 and 132 (Introduction to Biology with laboratory), Biology 261 (Genetics with laboratory), and at least five other courses (three with laboratory) from the Department's total offerings. 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 the beginning of their third year. A student must earn the 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, 402) 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, 406). 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 biochemistry-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 chair of either department.

## Biological Psychology Concentration

The Departments of Biology and Psychology jointly offer an interdisciplinary 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 take courses that fulfill one of three tracks within the concentration: Behavioral Science, Organismal Neuroscience, or Molecular Neuroscience. Students are exposed to original research throughout the concentration and may elect to spend a portion of their fourth year engaged in a thesis project. 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.

## Courses

Biology 114, 115 - 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 at preregistration. Recently taught topics include evolution, vertebrate history, biological conservation, unseen world of microbes, reproductive biology, nutrition, biology of birds, cancer, human heredity, medical detectives, biology of aging, exercise physiology, cell wars, environmental biology, biotechnology, and genetic engineering. Intended for nonmajors. One unit each semester.
Biology 117 - Perspectives in Biology Fall
An introduction to evolutionary theory, biology's most pervasive paradigm, and how it sheds light on the phenomenon of behavior. This course presents an approach to the study of behavior, including human behavior, alternative to those used in psychology. Topics include: genetics and its relationship to behavior, natural selection theory, origin of altruism, ultimate cause of reproductive strategies and mating systems, human phylogeny, cultural evolution, and evolutionary psychology. Preference is given to psychology majors. 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. Three lectures and one laboratory period. Prerequisites: introductory and organic chemistry. 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. Three lectures and one laboratory period. 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. Three lectures and one laboratory period. One and one-quarter units.
Biology 132 - Introduction to Biology 2
Spring
A study of the structure, function, and diversity of plants and invertebrates. Three lectures and one laboratory period. Open to biology majors and prospective biology majors. One and one-quarter units.

## Biology 213 - Comparative Chordate Morphology <br> 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. Three lectures and one laboratory period. Organismal biology. One and one-quarter units.

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 both enrichment and pure cuiture methods, diagnostic microbiology, and physiology. Three lectures and one laboratory period. Molecular and cellular biology. One and one-quarter units.

## Biology 230 - Developmental Biology 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. Three lectures and one laboratory period. Organismal biology. One and onequarter units.
Biology 233 - Aquatic Ecology Fall A detailed introduction to fresh-water ecosystems. The laboratory combines field work on two ecosystems-a lake and a stream-with laboratory work characterizing the physical and chemical environment of these ecosystems and their biological communities. Three lectures and one laboratory period. Ecological and Evolutionary Biology. 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. One unit.
Biology 261 - Genetics
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. Prerequisites: One semester of organic chemistry. One and one-quarter units.
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. Prerequisite: One semester of organic chemistry. Three lectures and one laboratory period. Molecular and cellular biology. 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. Three lectures and one laboratory period. Organismal biology. One and one-quarter units.
Biology 275 - Biological Statistics Alternate years 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. Three lectures. Prerequisites: Biology 131, 132, a semester of college mathematics. One unit.
Biology 280 - General Ecology
Fall
An introduction to the science of ecology. The interactions among animals and plants and their environments are considered at the levels of the individual, the population, the community, and the ecosystem. Three lectures, one laboratory period and field trips. Ecological and evolutionary biology. One and one-quarter units.

Biology 283 - The Theory of Organic Evolution
Analysis of the historical development of the modern synthetic theory of organic evolution emphasizing Darwin's theory of natural selection and the controversies that it has generated. The implications of the concept of evolution for other sciences and the humanities are also explored. Ecological and evolutionary biology. One unit.

## Biology 285 - Sociobiology

Alternate years in fall
A comparative overview of the diversity of animal social systems. The course stresses the evolution of insect and vertebrate societies but also offers a critical evaluation of the use of sociobiology to understand our own species. Social behaviors are examined through the lens of modern evolutionary theory. Mathematical approaches (population genetics, optimality, and game theory) are discussed and applied to the evolution of social systems. Related topics are the inclusive fitness concept, altruism, parent-parent and parent-offspring interactions, and communication. Ecological and evolutionary biology. One unit.

Biology 287 - Ethology and Behavioral Ecology
Alternate years in fall Animal behavior outside the dynamic of societal interactions. Behaviors are examined in terms of both proximate (neuroendocrine mechanisms and simple behavioral interactions) and ultimate (evolutionary) mechanisms. Topics include methodologies, behavioral genetics, neurobiological models of behavior, communication, economic decisions, competition, and mating systems. Straightforward mathematical modeling (neural networking, games, and optimality theories) are introduced and used to examine behavior. Ecological and evolutionary biology. One unit.
Biology 290 - Bioethics
Alternate years in spring
The biological background of selected ethical and social issues arising from advances in biology, and consideration of the morality and feasibility of public policy as they apply to these issues in a pluralistic society. Topics include Aristotelian ethics, environmental ethics, evolutionary ethics, control of reproduction and populations, tissue transplantation, and genetic counseling. One unit.

## Biology 301 - Biochemistry 1

A detailed study of the chemistry of biological molecules. Topics include the structural chemistry of the major classes of biological compounds, glycolysis, beta oxidation, enzymic catalysis, regulation, bioenergetics, Krebs Cycle, electron transport, and photosynthesis. Prerequisites: Chemistry 101, 221 , and 222 . Molecular and cellular biology. 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, DNA replication, transcription, and translation. Prerequisite: Biology 301. Molecular and cellular biology. One unit.

## Biology 303 - Biochemistry 1 Laboratory

Fall
This is the laboratory course to accompany Biology 301 and introduces the students to experimental methods for the characterization of biological molecules, including enzyme purification, gel electrophoresis, column chromatography, enzyme kinetics, and the measurement of respiration and photosynthesis. 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 concurrent course: Biology 301. One-half unit.

Biology 304 - Biochemistry 2 Laboratory
Spring
This laboratory accompanies Biology 302. It introduces the students to principles and methods of molecular biology, including DNA isolation, PCR, DNA sequencing, and molecular modeling. 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 concurrent course: Biology 302. One-half unit.

## Biology 311, 312 - Problems in Biology

Courses at an advanced level on selected subjects in the biological sciences, accompanied by intensive reading of original scientific literature. Recently taught topics include microbial physiology, electrophysiology, conservation biology, vertebrate history, advanced ecology, ornithology, field botany, scanning electron microscopy, genetic engineering, and the physiology of movement. Distribution area depends on subject. One unit each semester.

The molecular and cellular mechanisms of neuronal function. Topics include structure-function relationships of voltage-gated ion channels, mechanisms of signal transduction, membrane potential, gating currents, and synaptic transmission. The laboratory emphasizes techniques in neuropharmacology, neurobiochemistry, and molecular neurobiology, including isolation and characterization of RNA. Prerequisites: Biology 120 or 131, Biology 266, Chemistry 221 and 222. Molecular and cellular biology. One and one-quarter units.
Biology 361 - Toxicology
The science 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. Prerequisites: Biology 131 or 120 , Biology 261, Chemistry 221 and 222 . Organismal biology. One unit.

## Biology 372 - Epidemiology and Virology

Alternate years in spring The history and methodology of epidemiology including demographic studies, mortality and morbidity, experimental epidemiology, and observational studies (cohort and case-control). Emphasis is placed on evaluation of sources of error and deriving biological inferences from epidemiological studies. Part of the course focuses on human virology, including retroviruses and oncogenes. One unit.
Biology 390 - Animal Physiology
Spring
A comparative approach to the functioning of cells, organs, and organisms. Major themes are homeostasis, control mechanisms, and adaptation to the environment. Topics discussed 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. Three lectures and one laboratory period. Prerequisites: Chemistry 101 and 231, Physics 111. Organismal biology. One and one-quarter units.

## Biology 392 - Immunology

An introduction to the science of immunology. Course content includes the basic structure of the immune system, genetics, structure and function of antibodies, immune receptors and messengers, tolerance, hypersensitivity, autoimmunity and immunodeficiency. Prerequisites: Chemistry 101 and 221. Three lectures and one laboratory period. Molecular and cellular biology. One and one-quarter units.
Biology 401, 402 - Undergraduate Research
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. Two semesters ( $21 / 2$ units) may be counted toward the biology major; additional semesters may be taken as elective only. One and one-quarter units each semester.
Biology 405, 406 - Directed Reading
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 each semester.

## Biology 407, 408 - Honors Research

Annually Individual 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 to Honors Program students only. One and one-quarter units each semester.

# Chemistry 

Richard S. Herrick, Ph.D., Professor<br>Robert W. Ricci, Ph.D., Professor<br>Timothy P. Curran, Ph.D., Associate Professor<br>Ronald M. Jarret, Ph.D., Associate Professor and Chair<br>Michael G. McGrath, Ph.D., Associate Professor<br>Jane M. Van Doren, Ph.D., Associate Professor<br>Frank Vellaccio, Ph.D., Associate Professor and Provost<br>Deborah J. Campbell, Ph.D., Assistant Professor<br>Glenn C. Jones, Jr., Ph.D., Assistant Professor<br>Chase C. Smith, Ph.D., Assistant Professor<br>Ramona S. Taylor, Ph.D., Assistant Professor<br>Gene A. Davis, Ph.D., Visiting Assistant Professor<br>Jamie L. New, M.S., Senior Laboratory Supervisor<br>David A. Benedetto, M.S., Laboratory Supervisor<br>Antonet de Souza-Goding, Ph.D., 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 hands-on 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 guidedinquiry 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 in their first year, 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 1 do not continue in the traditional chemistry sequence (see Chemistry 110). A student must obtain a grade of C or better in Chemistry 221 to continue in Chemistry 222. Furthermore, an average grade of C or better in Chemistry is required to continue as a chemistry major or minor.

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 an upper-division course in physics, biology, or mathematics for one chemistry elective.

The Chemistry Department offers qualified students an opportunity to conduct research (Chemistry 406 and 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. 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: Atoms and Molecules, Organic 1, Organic 2, Introduction to Equilibrium and Reactivity, Instrumental Chemistry and Analytical Methods 1, Physical Chemistry 1, Physical Chemistry 2, and Advanced Inorganic Chemistry. Advanced laboratory courses (Analytical Methods 2 and Physical Chemistry Labs 1 and 2) 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, (usually during their second year) and Calculus through Math 132, 134 or 136. Students are strongly encouraged to take Math 241 in preparation for Physical Chemistry.

## 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 1, Organic 2, Introduction to Equilibrium and Reactivity, Instrumental Chemistry/Analytical Methods 1, Physical Chemistry 1 and Inorganic Chemistry. The prerequisites for Physical Chemistry 1 are Math 132, 134, or 136 and two semesters of General Physics with lab. 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 121 or 131,301 and 302 with laboratories; Chemistry 101, 221, 222, 231 and 255; and one additional biology course with an associated biochemistry-oriented laboratory, in addition to the usual courses required of their major. 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.

## Courses

Chemistry 101 - Atoms and Molecules: Their Structure and Properties 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 half units.

> Chemistry 110 - Methods of Chemistry This course is designed to reinforce problem-solving methods that are used in Atoms and Molecalles, Organic 1, Organic 2, and Introduction to Equilibrium and Reactivity. The quantitative aspects of chemistry are emphasized. This course is not a preequisite for any other chemistry course but will be helpful for hose 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
Every third year
The course investigates the chemistry and physics of our environment through case studies of current environmental problems and the strategies being considered to solve or reduce the problems. One unit.
Chemistry 143 - Chemistry: Bane or Boon
Alternate years
An elective for non-science majors that examines the impact of chemistry, both good and bad, on our lifestyles and well-being. Among topics discussed are dyes, polymers, food additives, fuels, detergents, drugs and agricultural chemicals. Several of the major environmental disasters, i.e., Bhopal, Chernoble, Love Canal, are examined. Prerequisites: High School chemistry or permission of the instructor. One unit.
Chemistry 221 - Organic Chemistry 1
Spring
A study of organic compounds from two points of view: the chemistry of the functional groups and modern structural theory and reaction mechanisms. The chemistry of aliphatic hydrocarbons, alkenes, alkynes, benzene, and alkyl halides is introduced in a discovery mode. Radical substitution, addition and elimination mechanisms are studied in detail. Emphasis is placed on stereochemistry. One four-hour 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.

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Chemistry 222 - Organic Chemistry 2
A continuation of Chemistry 221. Alcohols, ethers, aldehydes, ketones, amines, carboxylic acids and their derivatives are studied. Nucleophilic 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: Minimum of C in Chemistry 221. One and one-half units.

Chemistry 231 - Introduction to Equilibrium and Reactivity
Spring
The course introduces students to the basic principles of Physical Chemistry. Laboratory experiments lead students to discover concepts including gas laws, chemical equilibria, heats of reaction, buffer capacity, and chemical kinetics. Lectures explain or expand upon lab results. Prerequisites: Chemistry 221, 222 (or permission of Chair); one semester of college calculus is a prerequisite. One and one-half units.

Chemistry 255, 256 - Physical Chemistry 1 and 2 Annually A study of the basic concepts, principles and methods of physical chemistry. Topics covered include molecular-kinetic theory, thermodynamics, structure and properties of solutions, electrochemistry, quantum theory, kinetics and transport processes. Courses in integral and differential calculus and introductory physics are prerequisites. One unit each semester.
Chemistry 257, 258 - Physical Chemistry Laboratory 1 and 2
Spring, fall
This laboratory course is designed to complement Physical Chemistry 255, 256 and to encourage ability in research. In the laboratory students test the more important physical and chemical laws and in doing so acquire the habit of exact chemical techniques and quantitative interpretation. Experiments in spectroscopy, thermochemistry, electrochemistry, colligative properties, chemical and phase equilibria, kinetics and inorganic synthesis are performed. One four-hour laboratory per week. Overload. One-half unit each semester.

## Chemistry 266 - Instrumental Chemistry/Analytical Methods 1

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 electrochemical methods of analysis. Laboratory and lecture material is supplemented with readings from the current chemical literature. 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. 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. Students use their new knowledge of instrumentation and analytical method development to design targeted experiments. The final project is a multiple-week, open-ended, student-designed research project. One four-hour laboratory per week. Overload. One-half unit.
Chemistry 301 - Advanced Inorganic Chemistry
Spring
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. One unit.
Chemistry 302 - Advanced Organic Chemistry

The course aims to acquaint the student with selected topics in physical chemistry. The course material will change yearly, depending upon the need of the students and direction of the professor. Topics included in the past have been Molecular Orbital Theory and Woodward-Hoffmann rules; statistical mechanics; biophysical chemistry, thermodynamics, enzyme kinetics, diffusion and sedimentation, molecular spectroscopy and light scattering; and group theory and its chemical consequences. One unit.

## Chemistry 304 - Synthetic Organic Chemistry

Alternate years The course 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. One unit.
Chemistry 309-Spectroscopy
This course focuses on chemical structure identification through the interpretation of spectroscopic data. With a concentration on organic molecules, Mass, Vibrational (IR and Raman), and Magnetic Resonance (NMR and EPR) spectra are analyzed. There is an emphasis on NMR spectroscopy (including an introduction to modern multipulse techniques) to elucidate molecular structure. The course is conducted with a problem-solving approach and student participation is expected. Prerequisite: Chemistry 222. One unit.

## Chemistry 310 - Bioorganic Chemistry

This course 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 <br> Every third year This course will be organized around the important biological proteins, enzymes and other biologi-

 cal systems that utilize metal ions. An important goal will be to explain their functional/positional importance based on the chemistry at the metal center(s). Topics will 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 will be discussed to demonstrate the dynamic nature of the subject. Prerequisite: Chemistry 301. One unit.
## Chemistry 313 - Atmospheric Chemistry

Alternate years
This course will examine 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 255. One unit.

## Chemistry 315 - Advanced Analytical Chemistry

Alternate years This course focuses on recently developed instrumental methods and how these methods can be combined to solve contemporary problems in the analytical sciences. For example, a variety of analytical techniques are needed to study suffaces and surface chemical reactions. The course includes active classroom discussion of the physical principles, strengths and weaknesses of each technique, along with practical examples of its use and application. Students use the current literature to explore newly-developed analytical techniques and their applications. The course concludes with student presentations on current topics in the chemical literature. One unit.

## Chemistry 405, 406 - General Research 1 and 2

This 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 in the form of a journal article, 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. It 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 third-year and fourth-year students are invited to apply early in the Fall semester. The candidate's academic record will be reviewed to determine if the student could reasonably benefit from such a program.
Chemistry 407, 408 - Honors Research 1 and 2
Fall, spring
This program builds on the experiences gained in Chemistry 405 and 406. Honors research provides the opportunity for further in-depth investigations. The culmination of all research projects will be a thesis to be defended before 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 honors research experience. It 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. Participants must maintain an overall GPA of 3.0 and a minimum of a grade B in major courses. Both Chemistry 407 and 408 are by permission only. Interested fourthyear students are invited to apply early in the Fall semester. The departmental honors committee will review the candidate's academic record to date, with particular attention given to performance in the prerequisite courses: Chemistry 405 and 406.

## Classics

Thomas R. Martin, Ph.D., Jeremiah W. O'Connor Jr. Chair in the Classics, Professor
Blaise Nagy, Ph.D., Professor
John D. B. Hamilton, Ph.D., Associate Professor
Kenneth F. Happe, Ph.D., Associate Professor
D. Neel Smith, Ph.D., Associate Professor

William J. Ziobro, Ph.D., Associate Professor and Chair
Nancy E. Andrews, Ph.D., Assistant Professor
Ellen E. Perry, Ph.D., Assistant Professor
Nina C. Coppolino, Ph.D., Visiting Assistant Professor
George R. 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 nonmajor 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 can offer courses in Mediterranean Archaeology at various levels, from beginning to advanced. The overall aim of the department is to enhance the cultural development and the language skills of all its students through a variety of instructional methods, including the Perseus Project, a digital library that is focused on ancient Greece. The current faculty includes two of the principal designers of the Project, with the result that Perseus is used more widely in the curriculum at Holy Cross than at any other college or university. Other important resources, such as the Thesaurus Linguae Graecae, are available for students over the Holy Cross electronic network.

For the student who chooses classics as a major, the department offers a wide selection of courses, seminars, and tutorials that provide a liberal and comprehensive view of the ancient world through first-hand contact with the Greek and Roman authors. The program for majors is designed to develop as rapidly as possible a command of the classical languages, to introduce the student to
the techniques of textual and historical analyses, and to survey the Greek and Roman worlds through literary 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 those texts and institutions which are the roots of Western civilization. In addition, the classroom experience can be enhanced by participation in study-abroad programs (in Rome, Athens, and elsewhere), to which the department subscribes. Recent classics majors have pursued advanced degrees at several of the finest institutions of higher learning in the country, as well as careers in journalism, law, business, medicine and banking, among others.

A minimum of 10 courses is required for a major in classics; these can be distributed among Latin, Greek and other courses in classical studies which are appropriate to a student's primary interests. To satisfy the minimum requirements of the classics major, a student will typically take at least one semester of an author-level course in one of the two languages and advance through the intermediate level in the other. Normally, majors take no fewer than eight courses in the original languages (courses listed under Greek and Latin). Adjustments to the language requirements can be approved by the Chair of the department.

The department offers two merit scholarships annually-the Henry Bean Classics Scholarships-to incoming students with distinguished academic records who plan to major in the classics at Holy Cross. A recipient of a Henry Bean Classics Scholarship is granted full tuition, independent of need. The 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 Chair, Classics Department, College of the Holy Cross, Worcester, MA 01610. The application deadline is February 1.

## 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 105 - Intensive Introduction to Latin Spring
Latin grammar and a limited amount of reading for students with no previous training in Latin with a view toward preparing the student for Intermediate Latin after only one semester. One unit.
Latin 213, 214 - Intermediate Latin 1, 2 Annually
For students who have completed two years of precollege Latin or Latin 101 and 102, or 105. This course includes a brief grammar review and selected readings from Latin authors. One unit each semester.
Latin 315, 316 - Readings in Latin
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. One unit each semester.
Latin 320 - Sallust and Livy
Every third year
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 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. Supplementary reading of selected Senecan letters in English. Historical background. Development of letter writing as a literary form. One unit.

A detailed study of selected satires of Juvenal. Although emphasis is placed on the literary analysis of satire, some attention also is given to Juvenal's opera as a source of understanding of 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. Selections from Seneca and Suetonius are considered as well as the influence of Petronius on later literature and art. One unit.

Latin 334 - Lucretius Every third year
An extensive examination of the poetic and philosophic message of Lucretius' Epicurean poem, the De rerum natura. One unit.

Latin 335 - Seneca Every third year
A study of Roman Stoicism through examination of selected letters and dialogues of Seneca. One Senecan tragedy is included, with attention to the author's use of drama as a vehicle for philosophical indoctrination. 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
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. Cross-registered with Religious Studies 275. 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

Annually
Designed for selected students with approval of the professor and Department Chair. This work may be done for one or two semesters (one or two units of credit) and takes the form of either a survey of selected authors or a specialized study of a single author, genre, theme or period. One unit each semester.

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, and a limited amount of reading at the end of the course, 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. Offered mainly for students who have completed Greek 101 and 102 or 105, or have had two years of precollege Greek. One unit each semester.
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 338 - Plutarch
Every third year
Translation and textual analysis of extensive selections from Plutarch's Parallel Lives. Emphasis centers around the moralizing and anecdotal character of Plutarchian biography and Plutarch's concepts of virtue (arete) and the statesman (politikos). Outside readings in English from Plutarch's Lives and Moralia and from Suetonius' Lives of Twelve Caesars. 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 350 - Hesiod/Homeric Hymns Every third year
A study of the Greek text of Hesiod, the Theogony, the Works and Days, the Shield and the important fragments. Also the corpus of the Homeric Hymns. Background material of Greek religion in the archaic age and the social and economic condition of Greek peasant life is discussed. One unit.

## Greek 351 - Attic Orators

Every third year
Selected speeches from the Attic Orators such as Antiphon, Andocides, Lysias and/or Demosthenes are read in the original, combined with a rhetorical analysis and a study of the historical and political events of the late fifth and fourth centuries B.C. 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, paying attention to differences between authors as well as differences from Attic Greek. Historical situation and theology will be discussed in the course of translation. Cross-registered in the Department of Religious Studies as Religious Studies 352. 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 20th century 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 the genre, comedy, are emphasized. One unit.

## Greek 364 — Pausanias

Every third year
Pausanias' Guide to Greece is a unique, eyewitness description of Greece in the second century. Selections from all ten books of Pausanias in Greek are read. One unit.
Greek 401, 402 - Tutorial Seminar Annually
Designed for selected students with approval of the professor and Department Chair. This work may be done for one or two semesters (one or two units of credit) in the form of either a survey of selected authors or a specialized study of a single author or period. One unit each semester.

## Classics (In English)

Classics 101 - Ancient Greek Literature and Society Fall
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
Spring
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 104 - Greek Literature to 480 B.C.
Every third year
A study of the beginnings of Greek literature via The Iliad and The Odyssey, Hesiod's Works and Days and Theogony, the Homeric Hymns, the Greek lyric and elegiac poets, and Herodotus. Ancient readings are balanced by parallels in modern literature and both are illustrated with slides and films. One unit.
Classics 105 - Fifth Century Greek Literature
Every third year
This course focuses on the tragic drama of Aeschylus, Sophocles and Euripides: in particular, the Oresteia Trilogy of Aeschylus, the Ajax, Philoctetes, Electra, Antigone, and Oedipus Tyrannus of Sophocles; and the Alcestis, Medea, Hippolytos, Hecuba, The Trojan Women, Helen, Ion, and Bacchae of Eurpides- 16 hour-long plays in all. There is the usual outside reading of scholarly articles and the viewing, by video, of recent productions of the plays. There are additional readings from Greek Comedy and from the historians Herodotus and Thucydides. One unit.
Classics 106 - Classical Comics
Alternate years
An examination of the comedies of Aristophanes, Menander, Plautus and Terence, with attention to the development of comedy in the ancient world and a consideration of its political and cultural context. 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 developed in Biblical and Classical literature have been adapted to new circumstances and handed down over the past two millennia by various masters through a process Barbara Bono calls "transvaluation." 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 - Roman Family and Home
Every third year
This course examines the institution of the Roman family as well as the houses and apartments in which families lived. Specific topics to be covered include the power of the father (patria potestas); the role of women as wives, mothers, educators and political assets; childhood and education in the Roman world; the family life of slaves and freed slaves; public and private spaces in the ancient house, and the use of the house to showcase the achievements and personalities of individual family members. Material culture-ancient houses and apartment buildings as well as their decoration and furniture-will comprise a significant component of this course. One unit.
Classics 131 - Classical America
Fall, spring
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
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. Cross-registered in the Department of History as History 141. One unit.
Classics 142 - History of Rome Spring
A survey of Roman civilization from the Regal period to the early Empire, with a special focus on the political and social forces that led to the establishment of the Principate. The course will concentrate on the sources for this period: the historians, inscriptions, and monuments. Cross-registered in the Department of History as History 142. One unit.
Classics 143 - Athenian Democracy
Fall
An analysis of the institutions, literature, and political thought inspired by the democracy of fifth and fourth century Athens. 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 Greco-Roman 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). Cross-registered in the Department of Visual Arts as Visual Arts History 142. One unit.

## Classics 241 - Hellenistic History

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. Cross-registered in the Department of History as History 241. One unit.

A survey of Roman imperial civilization from the first to the sixth century. The course will concentrate on the sources for this period: the historians, inscriptions, monuments, and coins. Cross-registered in the Department of History as History 242. One unit.

## Classics 261 - Ancient Coins

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, coinage 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. Cross-registered in the Department of Visual Arts as Visual Arts History 248. 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 developments in the representation of the human form, the use of art as both 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." Cross-registered in the Department of Visual Arts as Visual Arts History 262. One unit.

Classics 263 - Roman Sculpture
Alternate Years
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. Cross-registered in the Department of Visual Arts as Visual Arts History 263. 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. Cross-registered in the Department of Visual Arts as Visual Arts History 247. 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. Cross-registered in the Department of Visual Arts as Visual Arts History 265. 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. One unit.

Classics 401, 402 - Tutorial Seminar
Annually
Designed for selected students with approval of the professor and Chair. Particular areas of classical civilization and/or literature may be studied for one or two semesters. One unit each semester.

## Economics

Charle's H. Anderton, Ph.D., Professor
John R. Carter, Ph.D., Professor
John F. O'Connell, Ph.D., Professor
David J. Schap, Ph.D., Professor
Nancy R. Baldiga, C.P.A., M.S.T., Associate Professor and Accounting Coordinator
David K.W. Chu, Ph.D., Associate Professor
Thomas R. Gottschang, Ph.D., Associate Professor and Chair
George Kosicki, Ph.D., Associate Professor
John D. O'Connell, M.B.A., C.P.A., Associate Professor
Kolleen J. Rask, Ph.D., Associate Professor
Nicolas Sanchez, Ph.D., Associate Professor
Scott Sandstrom, M.S., J.D., C.P.A., Associate Professor
Miles B. Cahill, Ph.D., Assistant Professor
Jill L. Dupree ${ }_{i}$ Ph.D., Assistant Professor
Katherine A. Kiel, Ph.D., Assistant Professor
Kevin J. Deedy, M.B.A., C.P.A., Lecturer
The Economics Department offers majors and minors in two distinct subject areas: economics and economics-accounting. Also offered is a select honors program. The number of students permitted to major or minor in economics-accounting is limited. Students may apply for the economicsaccounting major during the admission process or subsequently in the spring of their first or second year. Introductory and intermediate-level courses are also available for nonmajors. 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 and finance, 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 by advanced placement (a score of 3 or better 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.

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 second through fourth years. At least three of the economics electives must be upper-level courses

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having as prerequisites Economics 255 (Microeconomics), Economics 256 (Macroeconomics), or both. These courses are numbered between 301 and 399. 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.

## 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.

Required courses in the major include accounting principles ( 2 semesters), intermediate accounting ( 2 semesters), 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 economicsaccounting 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) and Economics-Accounting 171 and 172 (Principles of Financial Accounting) during the first year; Economics-Accounting 277 and 278 (Intermediate Financial Accounting) and Economics 111 and 112 (Principles) 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.

## Departmental Honors Program

This program is usually limited to four third-year and four fourth-year economics majors. Students apply for the program in the first semester of the third year and must 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 upper-level economics elective.

## 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 who take Economics 217 (Money and Banking) to complete the minor are not permitted to take Economics 312 (Monetary Theory). Students majoring in Economics-Accounting and students enrolled in double majors in other departments of the College are not eligible for the minor. Courses taken on an audit or pass/no pass basis do not satisfy the requirements of the minor.

## The Economics-Accounting Minor

Students interested in other major fields may consider pursuing a minor in economics-accounting. Minors must complete five required courses and two electives. The required courses include: Economics-Accounting 181 and 182 (Principles of Financial Accounting), Economics 111 and 112 (Principles of Economics), and Economics-Accounting 277 (Intermediate Financial Accounting I). Electives include: Economics-Accounting 270 (Governmental and Nonprofit Accounting), Economics-Accounting 275 (Corporation Finance), Economics-Accounting 278 (Intermediate Financial Accounting II), Economics-Accounting 282 (Auditing), Economics-Accounting 292 ( Federal Income Taxation), Economics-Accounting 389 (Managerial Accounting) and EconomicsAccounting 390 (Advanced 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 may take either the first semester or both semesters of the sequence Economics-Accounting 181, 182 (Principles of Financial Accounting).

## Courses

## Economics Courses

## Economics 111, 112 - Principles of Economics <br> Annually <br> 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 215 - Economic History of the United States
Investigates the development of the American economy from colonial days to the present. Special emphasis is placed on the long-run historical perspective on current issues, such as the government debt, migration, and international markets. Prerequisites: Economics 111, 112. One unit.

[^0]and supply, monetary policy, interest and exchange rate determination, and the effect of the financial system on the macroeconomy. Closed to Economics majors. Students cannot take both Economics 217 (Money and Banking) and Economics 312 (Monetary Theory). Prerequisites: Economics 111, 112. One unit.

## Economics 218 - Urban Economics <br> Spring

Applies economic tools to study the complex problems of the urban community. Attention is focused on an increased understanding of the emerging policy issues facing cities. Special emphasis is given to the location and growth of cities, the interaction of poverty and urban housing and labor markets, and policy options to encourage urban development. Prerequisites: Economics 111, 112. One unit.

Economics 221 - Economic Development of Modern China
Alternate years
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 224 - Environmental Economics Fall
Shows how natural resources and the environment 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; what causes them and how they can be reduced. Current 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 227 - Economics, Ethics and Religion

Alternate years
Explores ethical and religious perspectives on economics. Topics include ethical and religious presuppositions, the development of economics as a social science, ethics and religion in the history of economic thought, capitalist/socialist debates, income distribution and poverty, discrimination, family economics and stewardship, and pastoral letters related to economics and religion. Prerequisites: Economics 111, 112. One unit.

## Economics 249 - Statistics

Fall, spring
An introduction to statistical methods emphasizing the statistical tools most frequently used in economic analysis. Topics include descriptive statistics, probability theory, random variables and their probability distributions, estimation, hypothesis testing, and linear regression analysis. Prerequisites: Economics 111, 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: Mathematics 125, 126, or the equivalent; Economics 111, 112. 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: Marhematics 125, 126, or the equivalent; Economics 111, 112. One unit.
Economics 302 - Industrial Organization and Public Policy
Spring
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
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
Fall
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

Economics 313 - Mathematics for Economists
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, 256. One unit.

## Economics 314 - Econometrics

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, and 256. One unit.

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

Annually
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 400 - Directed Readings in Economics
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 Spring
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 of this endeavor 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 171, 172 - Principles of Financial Accounting Annually 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. During the first semester, examines the proper accounting treatment of the major assets of merchandising and service companies including cash, accounts receivable, inventory, property, plant and equipment. The second semester continues an examination of basic accounting, focusing on economic activity related to liabilities and stockholders' equity. Introduces the cash flow statement, basic financial statement analysis and special topics such as partnership accounting, income taxes and accounting for manufacturing companies. One unit each semester.
Economics-Accounting 181, 182 - Principles of Financial Accounting
Annually Same as Economics-Accounting 171, 172. Intended for students other than accounting majors. One unit each semester.

Economics-Accounting 270 - Governmental and Nonprofit Accounting
Spring
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 171, 172 or 181, 182. One unit.

Economics-Accounting 275 - Corporation Finance
Fall, spring
Topics include management of assets, tax factors in business decisions, the various sources of capi-
tal, 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.
Economics-Accounting 277, 278 - Intermediate Financial Accounting
Annually
This course offers a thorough study of the proper valuation of assets, liabilities, and stockholder's 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 first semester includes a quarter-unit computer lab. Prerequisites: Economics-Accounting 171, 172 or 181, 182. One and a quarter units fall semester; one unit spring semester.
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 171, 172 or 181, 182. 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 171, 172 or 181, 182. One unit.
Economics-Accounting 387, 388 - Business Law
(Based on the Uniform Commercial Code)
Annually
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 171, 172 or 181, 182. One unit each semester.
Economics-Accounting 389 - Managerial Accounting
Fall
An introductory study of cost systems, activity-based management, and management evaluation sys-
tems. The emphasis is on managerial control through the use of accounting data. Prerequisites: Economics-Accounting 171,172 or 181,182. One unit.
Economics-Accounting 390 - Advanced Accounting Spring
Covers advanced problems relating to partnership formation, operation, and liquidation; a study of
corporate business combinations and consolidated financial statements under the pooling and pur-
chase accounting concepts; and other accounting topics such as installment sales, consignments,
branch accounting, bankruptcy and corporate reorganizations. Prerequisites: Economics-
Accounting 277, 278. One unit.

## Education

Joseph H. Maguire, M.A., Associate Professor and Chair and Assistant Dean<br>David J. Lizotte, M.A., Director of the Teacher Certification Program and Lecturer<br>Denis J. Cleary, M.A.T., Lecturer<br>John P. Collins, Ph.D., Lecturer<br>Harold F. Smith, Cand. Ed.D., Visiting Instructor

Thomas F. Gibbons, M.Ed., Facilitator of the Pre-practica and Practica;, Burncoat Senior High School
Assistant Adjunct Lecturers: Thomas G. Bostock, Burncoat Senior High School; Suzanne C. Kelly,
Burncoat Senior High School; Louis Lebel, Burncoat Senior High School; Lorraine Tegan, Shrewsbury High School; Judith Whitmore, Shrewsbury High School
Cooperating Practitioners (from Burncoat Senior High School): Scott Bousahda, Thomas Bostock, Ellen Cawley,Thomas Costello, Dianne Cummings, John Foley, William Foley, Carlos Lugo, Sally Maloney, Patricia M. Markley, John McGuirk, Mary J. Murphy, Edward C. Nelson, Cosette Ploof, Barbara Polewaczyk, Ann Ritzel, Daniel Rushton.
(From Shrewsbury High School): Constance Bartelson, Norman Danielson, John Hodgen, Linda Mongiat, Lorraine Tegan, Patricia Yurkinas.
Professional Liaison: Thomas F. Gibbons M.Ed., Burncoat Senior High School.
The Department of Education offers courses in education intended to introduce students to the concerns and issues of secondary education. Students majoring in Biology, Chemistry, English, French, History, Latin, Mathematics, Physics, one of the Social Studies or Spanish, may prepare to become state-certified teachers of those subjects. To undertake the program leading to certification, 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, admission to which is selective.

## Courses

## Courses Toward Certification

Education 122 - First Pre-Practicum - Teaching

## Education 167 - Educational Psychology

The student is introduced to relationships existing between psychology and education. Growth and development, the nature of the learner, measurement and evaluation, motivation, the teachinglearning 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
This course is 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 175-01 — Principles and Methods of Teaching Secondary History

 and Social StudiesSpring
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 175-02 - Principles and Methods of Teaching Secondary Mathematics
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 175-03 - Principles and Methods of Teaching Secondary English
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 175-04 - Principles and Methods of Teaching Secondary Languages

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 175-05 - Principles and Methods of Teaching Secondary Science
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 Certification Program. When taken with the rest of the program, it leads to Massachusetts certification as a middle school teacher. The middle school student, curriculum and other issues are covered. 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 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.

## Other Courses

Education 111 -Teaching International Studies
In this class, seniors or juniors who have studied abroad develop activity-based lessons about their study abroad and present them as "International Ambassadors" in Worcester's elementary schools. The class includes a weekly seminar which focuses on lesson development and presentation techniques, and weekly presentations in elementary schools totaling 3-4 hours each week. This class is appropriate for students who have studied abroad and wish to share the excitement of living and lèarning overseas with elementary school children. It is open to all study abroad participants and requires no previous teaching experience. One unit.
Education 120 - Education for Social and Political Change Fall, spring
This course seeks to define and describe the linkages between the Economic, Social, and Political organizations and systems of Education. The course begins with an analysis of the argument that education is a political activity and includes additional analyses of: 1 . Identity, representation and
resistance; 2. Power in knowledge; 3. Belief systems; 4. Space, location, community and imagina-
tion; and finally, praxis, or the linkages of theory and practice, reflection and action. One unit.
Education 162 - Principles of Guidance Fall, every second year
Students are introduced to a consideration of basic issues of concern in the helping relationship. It explores these issues through readings, writing and discussion. Among the areas of study are death, violence, loneliness, intimacy and hope. One unit.

Education 200 - Innovations and Current Controversies in Education (Special Topics in Education)

Fall, spring
This course seeks to examine current issues in educational practice. Examples include testing and assessment, charter schools, bilingual problems, inclusion and full service schools. Tracking the development of these ideas and practices as they move from overarching theory to particular instances of practice, and back again, provides unique insight into their potential to educate. One unit.

## Education 202 - Tutorial

By arrangement
Tutorial and research projects designed by students and faculty members. Admission determined by evaluation of proposal. One unit.
Note: There is a willingness and commitment on the part of the departmental faculty to encourage students preparing to serve as teachers in private as well as public secondary schools, and, in particular, to assist students preparing to teach religion. Adjustments in course readings and assignments will be made to assist the student interested in the teaching of religion, especially in Education 167.

## English

Patricia L. Bizzell, Ph.D., Professor
Robert K. Cording, Ph.D., Professor
Maurice A. Géracht, Ph.D., Stephen J. Prior Professor of Humanities
Thomas M.C. Lawler, Ph.D., Professor
Richard E. Matlak, Ph.D., Professor
B. Eugene McCarthy, Ph.D., Professor

Danzy Senna, M.F.A., William H.P. Jenks Chair in Contemporary American Letters, Visiting Professor
Eve Shelnutt, M.F.A., Professor
Patrick J. Ireland, Ph.D., Associate Professor
James M. Kee, Ph.D., Associate Professor and Chair
William R. Morse, Ph.D., Associate Professor
Philip C. Rule, S.J., 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
Bertram D. Ashe, Ph.D., Assistant Professor
Sarah Luria, Ph.D., Assistant Professor
Shawn Lisa Maurer, Ph.D., Assistant Professor
James J. Miracky, S.J., Ph.D., Assistant Professor
Lee Oser, Ph.D., Edward Bennett Williams Fellow, Assistant Professor
Will Pritchard, Ph.D., Assistant Professor
Paige Reynolds, Ph.D., Assistant Professor
Jasna R. Shannon, Ph.D., Visiting Assistant Professor and Director of Writing Programs

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 even 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 entolled in two semesters of Critical Reading and Writing designated for majors. Students who declare English their major anytime after their first semester must take Critical Reading and Writing 1 (English 20) as a prerequisite to further pursuit of the major. All English majors are required to take four 100 -level courses from among the following seven surveys in British and American literature: Medieval, Renaissance, 18 th-century British, 19th-century British, 19th-century American, 20th-century British, and 20th-century American. At least two of the surveys that the student elects must be prior to the 19th century. The purpose of all of these surveys 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 area 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 surveys 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 (Medieval Women Writers, Restoration and 18th-century Literature, Early American Literature, AfricanAmerican Literary Tradition); some are organized according to literary type (Modern Drama, 19th-Century Novel); and some are by author (Chaucer, Dickens, Shakespeare, Frost/Bishop); others are arranged thematically (Tragic View, Nature/ Poetry); some deal with aesthetics and criticism (Feminist Literary Theory and Criticism); and others concentrate upon the art of writing (Composition, Creative Writing: Poetry and Fiction, and Expository Writing).

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 twosemester 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.

## Courses

## First-Year 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 10 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 130 - Critical Reading and Writing: Fiction

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.

## Upper-Division Courses

English 200 - Masterpieces of British Literature $\quad$ Fall, spring
A study of selected major works of British Literature. Non-majors only. One unit.

## English 201 - Masterpieces of American Literature <br> Fall, spring

A study of selected major works of American Literature. Non-majors only. One unit.

## English 240 - Basic Creative Writing

Annually
This is an introductory course in the techniques and practice of writing short stories, poetry, and the personal essay. No previous experience in writing in these genres is required. Class size limited to 12 students. One unit.
English 288 - Creative Writing/Poetry Annually The study of the form and technique of poetry, with emphasis on regular creative work and practical criticism of the student's own thinking. Permission of instructor required. Class size limited to 12. One unit.

## English 289 - Creative Writing/Fiction Annually

 Intensive reading and writing of short stories, in a workshop format combined with lectures on form, language, finding material for fiction, and other matters. CRAW 1 or 2 is prerequisite. Permission of instructor required. Class size limited to 12 . One unit.
## English 290 - Medieval Literature Survey

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 cen turies. One unit.

## English 291 - Renaissance Literature Survey

Fall and/or spring Covers significant texts from representative genres of the 16 th and 17 th centuries: philosophical dialogue, pastoral, lyric, literary criticism, tragedy, epic, and essay. One unit.
English 292 - 18th-Century Literature Survey
Fall and/or spring Covers the variety of literature from 1660 to the end of the 18 th 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 - 19th-Century American Literature Survey
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 - 19th-Century British Literature Survey
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 - 20th-Century American Literature Survey
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 - 20th-Century British Literature Survey 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
Fall and/or spring
Intensive reading and writing of expository essays to develop the student's authorial voice and style.
A section of Expository Writing will be devoted each term to students for whom English is a second
language or who come from a diverse or multicultural background. Permission of instructor required.
Class size limited to 12 . One unit.
English 313 - Middle English Literature
Spring
A course which develops the student's ability to deal directly with Middle English texts. Works read 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 319 - Medieval and Renaissance Drama Annually
A study of the English drama from its medieval beginnings through the Renaissance. Included are
mystery and morality plays and works of such Renaissance dramatists as Kyd, Marlowe, Jonson, Tourner, Webster, and Ford. One unit.
English 320-16th-Century Renaissance Literature
Every third year
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
Fall
Concentrates primarily on the poetry of the period, including works of Jonson, Donne, Herrick,
Carew, Herbert, Vaughan, Marvell, and Milton. One unit.
English 322 - Epic and Romance
Every third year
A study of Spenser's Faerie Queene in context of the classical and Italian models which influenced it, Virgil's Aeneid, Ariosto's Orlando Furioso, and Tasso's Gerusalemme Liberata. 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 Elizabethan Drama Every third year
A study of those plays Shakespeare wrote during the reign of Elizabeth I. While the focus of the
course is Shakespeare's mastery of the history play and comedy, his experiments with tragedy are also
considered. Special attention is given to the nature of Elizabethan theater and to those cultural and
political influences which helped shape the playwright's response to his world. One unit.

English 328 - Shakespeare's Jacobean Drama
A study of the major works Shakespeare wrote during the reign of James I, especially his great tragedies and his experiments in romance drama. The course places those works in the context of Jacobean cultural and political history. 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 330 - Restoration and 18th-Century Literature Fall
A study of the major English writers from the time of the Restoration until the publication of Lyrical Ballads, including Dryden, Pope, Swift, and Johnson. One unit.

## English 331 - Dryden, Pope, and Swift

Every third year
A study of the poetry of Dryden and Pope and of the prose and poetry of Swift, with reference to important background materials, between approximately 1660-1745. 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 18 th-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

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 340 - Milton and Blake

The course begins with a close study of Milton's poetry, the development of his epic plans and visionary poetic, to Paradise Lost and Paradise Regained, then continues with a close study of the poems of William Blake from "Songs of Innocence" and "Experience" to his visionary texts, treating his relation to Milton and his own times. One unit.
English 341 - British Literature, 1780-1830 Fall
A study of the major writers of the Romantic movement-Edmund Burke, Mary Wollstonecraft, William Wordsworth, Dorothy Wordsworth, Coleridge, Mary Shelley, Percy Shelley, Byron, Keats, Hazlitt, Lamb, and DeQuincey. One unit.
English 343 - British Women Writers: 1780-1860
Every third year
Novels, poetry, and prose writings by women writing during and after the Romantic MovementFrances Burney, Jane Austen, the Brontes, Mary Wollstonecraft, Elizabeth Barrett Browning, and others. One unit.
English 344 - 19th-Century Bildungsroman
Every third year
The so-called novel of education-about the growth and development of a central character. Close readings of novels by Austen, Dickens, Eliot, Hardy, Butler, Wells, Chopin, Glasgow, and others. One unit.

## English 345 - Major Victorians

Every third year
A study of works by major poets such as Tennyson, Browning, Arnold, and Hopkins, and essayists such as Mill, Ruskin, and Caryle, to examine some of the cultural developments which define Victorianism. One unit.
English 346 - 19th-Century Novels
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.

A study of Dickens's development as the major novelist of Victorian England through analyses of works from his Early, Middle, and Late periods: Oliver Twist, Dombey and Son, David Copperfield, Hard Times, A Tale of Two Cities, Great Expectations, and Our Mutual Friend. One unit.

## English 350 - Early American Literature <br> 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
Every third year
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 varous genres in which 19th-century women engaged restrictive definitions of woman's sphere. One unit.
English 356 - American Novel to 1900
Every third year
A survey of selected works of major American writers of fiction before 1900, including Brown,
Cooper, Hawthorne, Melville, Twain, Simms, Howells, Stowe, Crane, and James. One unit.
English 357 - Modern American Poetry
A close
Every third year
A close analysis of the development of Am
temporary peris of the development of American poetry from the early 20th century up to the conOne unit. One unit.
English 358 - Modern American Novel
Spring
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 360 - Poetry \& Religion/The European Tradition Every third year
A course that explores the relation between poetry and religion in Dante, Milton, Goethe, Blake, And Hopkins; other authors may include Theresa of Avila, John of the Cross, Tennyson, C. Rossetti, Auden, R.S. Thomas, Jennings, Hill, Heaney, and Murray. One unit.
English 361 - Poetry \& Religion/The American Tradition
Every third year
A course that explores the relation between poetry and religion in Poe, Emerson, Whitman,
Dickinson, Eliot, Merton, Snyder, Wilbur, and Hayden. Various biblical, Hindu, Buddist, and gnostic readings will be examined. Other authors may include W. James, Pound, Ginsberg, C. Wright, and Warren. 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 writ-
ings. 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 Portrait of the Artist as a Young Man or Dubliners. One unit.

English 365 - Modern British Poetry
Every third year
A study of the major British poets in the first half of 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

Annually
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

Alternate years
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
Annually
An examination of post-civil rights movement novels, poetry, nonfiction, art, film, and music from the perspective of Trey Ellis's "New Black Aesthetic." Compares Spike Lee, Jean-Michel Basquiat, Lisa Jones, Paul Beatty, Living Colour, and Terry McMillan to previous literary and political move' ments in African-American culture. One unit.
English 375 - Nature/Poetry
Every third year
A reading of natural history essays from the 18th to 20th century with emphasis on our problematic relationship to nature and the roots of that problem in scientific thinking and the arrogance of humanism. One unit.

English 376 - Contemporary Fiction
Every third year
An examination of recent developments in fiction through study of selected works of present-day writers. One unit.

English 377 - Contemporary Poetry
Annually
An examination of recent developments in poetry through study of selected works of present-day writers. 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 381 - Rhetoric

Every third year
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 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/race/class, feminism and ideology. One unit.
English 384 - Literary Criticism
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 Criticism
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 388 - Advanced Creative Writing/Poetry
For students who have taken Creative Writing/Poetry who want to refine their skills. Workshop format, with lectures and readings. Permission of instructor required. Class size limited to 12. One unit.
English 389 - Advanced Creative Writing/Fiction
Every third year
For students who have taken Creative Writing/Fiction who want to refine their skills. Workshop format, with lectures and readings. Permission of instructor required. Class size limited to 12 . 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 pres-
ent course listings. Representative examples include: Renaissance Love Lyric, Arthurian Tradition, Contemporary Women Writers, Renaissance Women Writers, Nineteenth-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.
English 401-406 - 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. 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. Two units.

# History 

Ross W. Beales Jr., Ph.D., Professor
James T. Flynn, Ph.D., Professor
William A. Green, Ph.D., Professor
Anthony J. Kuzniewski, S.J., Ph.D., Professor
Theresa M. McBride, Ph.D., Professor and Chair
David J. O'Brien, Ph.D., Loyola Professor of Roman Catholic Studies
James F. Powers, Ph.D., Professor
Karen L. Turner, Ph.D., Professor
John B. Anderson, M.A., Associate Professor
Lorraine C. Attreed, Ph.D., Associate Professor
Noel D. Cary, Ph.D., Associate Professor
Vincent A. Lapomarda, S.J., Ph.D., Associate Professor
Aldo Lauria-Santiago, Ph.D., Associate Professor
Mark E. Lincicome, Ph.D., Associate Professor
Thomas W. Worcester, S.J., Ph.D., Associate Professor
Michael R. West, Cand. Ph.D., Instructor
Stephanie E. Yuhl, Ph.D., Assistant Professor
Anthony B. Cashman Jr., Lecturer
The History Department offers a wide range of studies dealing with most of the world's major civilizations. There are few prerequisites, but students should select courses that are chronologically compatible. For those beginning a serious study of history, the department has designed entry-level courses, History 101 through History 114. Courses numbered 120 or above are considered intermediate and/or upper-level in difficulty. Students taking these courses are generally expected to enter them with a firm grasp of fundamental historical facts and concepts.

Majors in history must take a minimum of 10 courses. First-year courses count toward that total; advanced-placement credits do not. Two entry-level courses 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 Cold War, 1800-1990 (History 114). Majors also must take two United States history courses from those numbered above 120 and at least one course in the history of Africa, Asia, the Middle East, or Latin America. Majors must take at least two courses in the department in which the principal chronological content falls between the beginning of the Christian era and 1750. Courses in the history of the Americas do not fulfill this requirement. Some courses (e.g., History 111) fulfill two requirements. Entry-level requirements are ordinarily fulfilled by the end of the second year. Fourth-year history majors will not be admitted to entry-level courses in European history 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 include non-Western courses in their program.

Students who have scored four or above in their Advanced Placement test in American history are exempted from the entry-level American history courses. History majors with Advanced Placement credits in American history must take two American history courses numbered above 120. Students who have scored four or above in their Advanced Placement test in European history are exempted from the entry-level European history requirements, but they are required to take a minimum of two upper-level European history courses.

History is among the most encompassing academic disciplines. It is informed by economics, sociology, political science, and international relations; it embraces the arts and literature; and it is sensitive to developments in the basic sciences. Historians study the process of change over time. All aspects of human experience are of interest to historians; consequently the expertise and vision of each member of the History Department will vary according to his or her special orientation. History majors should seek academic encounter with professors having different interpretive approaches. Most important, majors should select courses carefully 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.

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 an advanced seminar or colloquium 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 recognizes outstanding achievement.

## Courses

History 101, 102 - 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. Sections are conducted in small groups of no more than 12 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. One unit each semester.
History 103 - Perspectives on Asia: "Traditional" East Asia
Fall
This course focuses on selected themes in the civilizations of Asia from the earliest times through the 19 th century. It will examine the philosophical, political, religious and artistic traditions of these great cultures, and how those traditions changed over time. Creative literature, films, field trips, lectures and discussions will be used. One unit.
History 104 - Perspectives on Asia: Modern Transformations Fall
The course focuses on historical and cultural movements in the Asian countries. This is a team taught course and themes will 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. One unit.
History 105 - History of Latin America 1: Colonial Period Fall Surveys Latin American history from pre-Columbian to modern times emphasizing native cultures the "discovery" of the New World; European conquest and the creation of colonial societies in the Americas; race, gender and class relations; the functioning of the imperial system; the formation of a peasantry; and the wars of independence. One unit.
History 106 - History of Latin America 2: National Period
Surveys 19th-and 20th-century Latin America, focusing on six countries in Latin America. Topics considered are the formation of nation-states, the military, development and modernization, the Catholic church and liberation theology, social and political movements for reform or revolution, -slavery and race relations, social history of the workers and peasants, and inter-American relations. One unit.
History 107 - 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. One unit.
History 109 - Ancient Civilization 1: Near East \& Greece

An examination of the growth and evolution of Rome from a city-state republic to its mastery of a Mediterranean empire. The course concludes with the restructuring of the Empire by Diocletian and Constantine, and the patristic synthesis of Christian and pagan cultures. 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 11 th 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. One unit.

History 112 - Emerging Europe, 1000-1500
Fall, spring
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. One unit.
History 113 - Europe from the 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 is given to 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. One unit.
History 114 - Europe from Napoleon to the End of the Cold War: 1815-1990 Fall, spring European history from the end of the French Revolution to 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, fas cism and Nazism, World War II, the history of the Cold War, the formation of the European Union, the collapse of communism in Eastern Europe, and the breakup of the Soviet Union. One unit.

## History 141 - History of Greece

A study of Greek history from the beginnings to the death of Alexander. Great emphasis is placed on a close analysis of the primary sources, many of which are now accessible through computer technology. Cross-registered in the Department of Classics as Classics 141. One unit.

History 142 - History of Rome
Spring
A survey of Roman civilization from the Regal period to the early Empire, with a special focus on the political and social forces that led to the establishment of the Principate. The course will concentrate on the sources for this period: the historians, inscriptions, and monuments. Cross-registered in the Department of Classics as Classics 158. One unit.
History 155 - Introduction to Russian Studies
Alternate years in fall An interdisciplinary study of Russian civilization, offered every other year. The course covers a theme (such as Russia and the West or the Russian Revolution), using the methodologies of literature, history and political science. Required of Russian Studies majors and open to others. Cross-registered in the Department of Political Science as Political Science 256 and in the Department of Modern Languages and Literatures as Russian 251. One unit.

## History 159 - Environmental History

Spring
Beginning with the early civilizations of Mesopotamia, the Mediterranean, and North China, this course integrates human experience with the natural order. It examines changing ratios of humans to the land and of humans to other species. Attention is given to the impact of the transfer of plants, animals, and diseases between the hemispheres after 1492. The course considers aesthetics-how perceptions of nature have differed over time among diverse peoples-and it examines the rise of environmentalism and environmentalist politics in the 19th and 20th centuries. Case studies will concentrate upon environmental crises in the contemporary world. One unit.

This course explores women's experience in Europe and the U.S. in an era which was constantly reinventing womanhood. Themes include the idea of equality, the New Woman, education, sexuality, ethnic migration, the creation of the welfare state, nationalism and imperialism, and women's work. This course will enrich students' understanding of the diversity of women's experience in Europe and the U.S. in the period since 1850. One unit.
History 201 - Colonial America
The exploration, settlement, and development of North America from the late 16th to the mid18th 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. Emphasis will be given to 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
American life and politics from the Civil War to the end of the 19th century. Emphasis will be given
"to 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, 206 - U.S. in the 20th Century
Annually
A study of the salient political, social, economic, and cultural developments in the history of the
U.S. from the beginning of the 20th century to the recent past. One unit each semester.

History $207-19$ th-Century U.S. Diplomacy
A study of the foundations and development of American diplomacy to the turn of the 20th cen-
tury, with an 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 from the turn of the century to the present. One unit.

History 209, 210 - Problems in American Political History Annually A two-semester course which deals with a number of issues in American political history. The first semester deals with 19th-century issues and the second semester those of the 20th century. Typical issues would include the rise of a party system, the development of a political opposition, and the nature of political culture. One unit each semester.
History 211, 212 - American Social and Intellectual History
Altermate years
An interdisciplinary examination of the political, economic, religious, social, and cultural development of the American mind from the discovery of America to the present. One unit each semester.
History 213 - Economic History of the United States
Fall
This course investigates the development of the American economy from colonial days to the present. Special emphasis is placed on the pattern of economic growth, in particular the interplay of economic principles and institutional forces shaping the transition from an agricultural to an industrialized economy. Prerequisites: Economics 111, 112. Cross-registered in the Department of Economics as Economics 115. One unit.

## History 215 - The Idea of American History

Alternate years
In this course writings of the major American historians are examined in terms of the sources and development of their thought and the uses which Americans made of their ideas. Historiography thus takes the form of intellectual history, and the objective is to become familiar with a most important expression of American national self-consciousness. 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. Cross-registered in the Department of Religious Studies as Religious Studies 205. One unit.

## History 217, 218 - Family in American History 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
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 224 - Latino History, North and South Alternate years in fall This course 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 225 - Central America and the Hispanic Caribbean Alternate years in spring This course 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 histories-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. 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 229 - Mexico Since Independence
Alternate years in fall This course will introduce students to the national history of Mexico (1820s-1980s). The themes we will consider include the formation and experience of peasants, workers, elites and middle sectors, the formation of the Mexican nation-state, 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. One unit.
History 231 - Medieval England to 1216
Alternate years in fall
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. One unit.
History 232 - Medieval England: 1216-1485
Alternate years in spring 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. One unit.

## History 234 - Poland and Ireland: Origins to 1815

Alternate years in fall 1) Comparative study of Polish and Irish nations, designed to illuminate the development of the West. 1) Origins to Renaissance and Reformation. 2) 17th century conquests. 3) Rise and defeat of democratic revolutions. Poland and Ireland were the frontiers, eastern and western, of Western Christendom and experienced in special ways the main developments of the West, from medieval origins to the late 18th century age of democratic revolutions, when the Partitions of Poland and the Act of Union ended the political independence of both. One unit.

[^1]History 239 - Great Powers and World Imperialism, 1815-1914 Alternate years in fall This course examines the political, economic, and technological evolution of the great states of Europe and North America as a basis for studying the territorial expansion of those states in the wider world. The ideological formulations of imperialism, including concepts of cultural and racial hierarchy, will be treated. Chief attention will be given to the British Empire. Political competition, alliances, and alignments among the great states will be examined in detail, particularly the relent less march from crisis to crisis until Europe's world imperium was shattered in the First World War. One unit.
History 240 - Demise of the European World Empires
Alternate years in spring This course charts the rise of the Third World. It examines the development of colonial nationalism in Europe's African and Asian empires, particularly those of France and Britain. The structure of imperial regimes will be studied in detail, as will the impact of those regimes upon the political, social, economic, religious, intellectual, and cultural lives of colonial peoples. Special attention will be given to the achievement of political independence in India and to colonial wars in Indo-China, Algeria, Congo (Zaire), and Kenya during the 1950s and 1960s. The course will conclude with a retrospective analysis of developments in the Third World since the end of the European era. One unit.
History 241 - Hellenistic History
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. Cross-registered in the Department of Classics as Classics 241. One unit.
History 242 - Decline and Fall of the Roman Empire
A survey of Roman imperial civilization from the first to the sixth century. The course will concentrate on the sources for this period: the historians, inscriptions, monuments, and coins. Cross-registered in the Department of Classics as Classics 242. One unit.

## History 243 - Medieval Spain

Altermate years in fall
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. One unit.

## History 244 - Modern Spain

Alternate years in spring
The development of Spain from its creation of the first world empire in the 16th and 17th centuries, through its imperial decline and revitalization in the Enlightenment, its Napoleonic experience, the evolution of the constitutional monarchy in the 19th century, and the struggle of political ideolo gies leading the Spanish Civil War in the 20th century. A survey of Franco and Post-Franco Spain concludes the course. One unit.

History 245 - 12th-Century Renaissance
Alternate years in fall
The first European creative surge, covering from the later 11th century to the mid-12th century. Emphasis given to European expansion and the Crusades, the struggle between the Church and the emerging institutional monarchies, the intellectual revival, and the fruition of Romanesque art and architecture. One unit.

History 246 - The Rise of the Gothic
Alternate years in spring The extension of the 12 th-century Renaissance from the mid-12th century to the early 13th cen tury. Emphasis given to the struggle between the Church and the emerging institutional monarchies, the mature development of the Papacy, the invention of representative government, the intellectual revival, and the emergence of Gothic art and architecture. One unit.

## History 247 - Renaissance Europe

Alternate years in fall
Surveys the significant intellectual, cultural, social and political developments across Europe, begin' ning with the achievements of Dante and 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. One unit.

History 249 - The Papacy in the Modern World
Annually
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 250 - The Later Middle Ages
Every third year in spring
A survey of Europe from the late 13th through the late 15th centuries, organized both topically and
chronologically. Topics include: kingship and government, warfare, church and lay piety, society and family, economy, and philosophy and education. One unit.
History 251 - History of Russia to 1905
Alternate years in fall This course studies three main stages in the history of Russia: 1) the development of civilization in Russia from origins to 1700; 2) the building of a westernized Russian empire, 1700 to 1855; and 3) the era of Great Reforms to the onset of the Revolutions, 1855 to 1905. One unit.
History 252 - 20th-Century Russia
Alternate years in spring This course studies the main stages in Russia's 20th-century experience: 1) the Russian Revolutions, 1905-1921; 2) the development of a new order, the Soviet Union, 1921-1941; 3) World War II and the Soviet super power, 1941-79; and 4) stagnation and the end of Soviet Union, since 1979. One unit.
History 253, 254 — Soviet Politics I: 1917-1953; Soviet and Russian Politics II:
1953-Present
A two-semester sequence dealing with Soviet/Russian politics and policies from the 1917
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: Political Science 102. Cross-registered in the department of Political Science as Political Science 255,256 . One unit each semester.
History 255 - 20th-Century Europe: 1890-1939
Alternate years in fall From the high point of European global power and cultural influence, Europe descended into an era of world war, dictatorship, popular extremist ideologies, and unprecedented mass murder. Topics include: the pre-1914 "belle époque," the origins and nature of World War I, the Russian Revolution, the Versailles peace settlement, the "crisis of democracy" and the rise of fascism, the Italian, German and Soviet dictatorships, the Spanish Civil War, appeasement, and the origins of World War II. One unit.
History 256 - Europe and the Superpowers: 1939-1991
Alternate years in spring World War II, the Holocaust, science and government, Cold War, the division of Europe, the revival of west-European democracy, de-Nazification, post-Stalin Russia, decolonization, the economic miracle, European integration, Berlin crises, Christian democracy, Gaullism, the sixties, the Prague Spring, Ostpolitik, the Green movement, perestroika, and the collapse of communism. One unit.
History 261 - Germany from Metternich to Hitler Alternate years in fall
Late to unify, late to industrialize, and late to acquire democratic institutions, Germany had to cope
with with all three processes at once, with tragic consequences for human rights and international order. This course analyzes the trends and circumstances in German and European history that came together to produce Nazism. This course also explores the presence of diversity and the alternative
pathways in German history that help explain postwar developments. Topics include religious ten sion and prejudice (Catholics, Protestants, and Jews), Prusso-Austrian duality, the German confederation, the revolution of 1848, German national liberalism, Bismarckian unification, the development of imperial Germany under the Kaisers, German socialism, World War I, the revolu' tion of 1918, the Weimar Republic, the Third Reich, and the Holocaust. One unit.
History 262 - Germany from Dictatorship to Democracy
Alternate years in spring In Western Germany after World War II, a people that once had followed Hitler now produced per: haps the most stable democracy in Europe. At the same time, eastern Germans lived under a new dictatorship that lasted more than three times as long as Hitler's. What is the place of the two post' war 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 modert Germany. Topics include: German liberalism, socialism, and political Catholicism before the Nazi era; the legacy of Nazism; the Allied occupation; de-Nazification, the Cold War, and the partition of Germany; Communism, 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 collapse of East Germany; and Germany since reunification. One unit.

## History 267 - Modern Italy

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

## History 269 - Fascist Italy and Vichy France

Spring
This course focuses on the nature of resistance to the Fascism in Italy and the French State under Vichy France, 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. The course provides an overview of the emergence of politicized intellectuals out of the opposition to fascism in Italy and France, and the shaping of the postwar political generation by the experience of war and the resistance to fas cism by reading the works of Carlo Levi, Ignazio Silone, Primo Levi, Albert Camus, Marguerite Duras, Jean Paul Sartre and Simone de Beauvoir. One unit.
History 270 - The West and the Wider World, 800-1500
Alternate years
This course explores the origins of the explosive growth of the European West toward the non' European world from the later Carolingian Age until the voyages of discovery in the era of ColumbusIt seeks to integrate the many sectors of European expansion in the five centuries before Columbus looking for the common factors and forces at work driving this aggressive growth. One unit.

## History 271 - The West and the Wider World, 1500-1650

Alternate years
The course examines why, among the world's great civilizations, Latin Christian Europe achieved a global hegemony in the early modern era. Principal attention is given to the growth of technical and geographical knowledge, to Portuguese discoveries in the Atlantic and Indian Oceans, to Spanish conquest of America, to Dutch imperium in the East Indies, and to the beginning of Anglo ${ }^{-}$ French penetration of North America and the Caribbean. Readings will consider the biological and environmental consequences of European discoveries and conquests. One unit.

History 272 - Europe and the Western World Hegemony, 1650-1815 Alternate years in spring Concentrates on political, social, and economic developments in Western and Central Europe: the development of modern monarchies, the transition to capitalism, and the beginnings of European industrialization. The competitive interaction of European states provides a framework for studying the growth of vast mercantile empires in the Americas, the evolution of slave-based plantation colonies, and the extension of European hegemony in Asia. One unit.

This course examines the political, social, and cultural developments in France from Roman Gaul to the reign of Louis XI. Stress will be placed on 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. One unit.

## History 274 - Early Modern France, 1515-1750

Alternate years in fall From the Reformation to the Enlightenment, France was at the center of European political changes. This course will study the politics, religion, society, and culture of early modern France from the reign of Francis I to the decline of the Old Regime. One unit.
History 275 - French Revolution and Napoleon Fall
From the Enlightenment to the Revolutions of 1789 and 1830 and the Second Republic of 1848, the 19th century in France contains the source of much of European and western civilization. The focus is on the history of the French Revolution, its causes and effects and the historical controversy which continues to surround almost every aspect of the Enlightenment and the Revolution; but the course also includes the transition to an industrial economy, the evolution of new social classes, designs for social change, and literary and artistic movements. One unit.
History 276 - Modern France
Spring
This course is designed to deepen students' understanding of the role France has played as the selfappointed arbiter of European culture, and France's contributions to intellectual, religious, literary and artistic movements. A second theme is France's ongoing relationship to the rest of the world as France developed and then lost its far-flung empire from New Caledonia to West Africa. Most importantly, students should come to appreciate France's central role in the movement toward European unity since World War II. One unit.

## History 278 - African History to 1885

Fall
This course examines African history and culture from its earliest times to the advent of colonialism in 1885. It focuses on the early migrations, state formations, trade, cultural interaction, the spread of Islarm, slavery, and early European contact. While lectures and assigned readings will be the basis for information, films will be used occasionally to provide more insight on the subject. One unit.

## History 279 - African History Since 1885

This course examines African history and culture from 1885 to the present, focusing largely on the colonial period and its impact on African culture, the socioeconomic structure, women, and development. It discusses the rise of national liberation movements, neocolonialism, and settler colonialism. Films will be used to enhance the subject. One unit.
History 281 - Imperial China
Alternate years in fall This course surveys Chinese history and culture from the classical period through the last empire. We will follow several themes throughout the class that will demonstrate how the tradition changes and remains intact in some instances in response to social and economic changes. Films, biographies, historical and philosophical writings, and western interpretations of events and personalities will offer students a variety of perspectives. One unit.
History 282 - Revolutionary China
Alternate years in spring This course introduces students to events, personalities, and concepts of particular significance for understanding China's 20th-century history. It covers the period from 1911 through the present in some detail through a variety of documentary sources, interpretive accounts, and literature. One unit. History 283 - Economic Development of Modern China

Alternate years in spring The goal of this course is 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. Cross-registered with the Department of Economics as Economics 221. One
unit.

History 285 - Japan under the Tokugawa Shoguns
This course examines the political, social, economic, intellectual, and cultural history of Japan between the late 16th and mid-19th centuries, coinciding with the political rise and fall of the Tokugawa shogunate. In the process, orthodox historiographical interpretations of this period as the early modern precursor to Japan's rapid modernization during the late 19th and 20th centuries will be reconsidered, along with the viability of conventional terms like early modern and modern for historical analysis. One unit.
History 286 - Modern Japan
Spring
This course is divided into two parts. Part One offers a diachronic overview of early-modern and modern Japanese history from the 17 th century to the present. It serves as general background for ${ }^{2}$ more detailed, synchronic examination of the dilemmas of modernization in Part Two, which focus* es on the period between the 1860 s and the 1930s. Topics for consideration include: industrialization and economic change; law and politics; education, religion, and the state; diplo ${ }^{-}$ macy and war; and cultural currents. One unit.

## History 287 - Japan Since World War II

This course examines the political, economic, social, intellectual, and cultural history of Japan since 1945. Some comparisons will be made with the prewar period, in order to place these developments within a broader historical context. Topics to be discussed 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. One unit.

History 288 - The Pacific War
This course 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, 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. One unit.

## History 289 - The Warrior Tradition in Japan

Alternate years in fall
The course uses the theme of the warrior tradition to examine important trends in Japanese socie' ty from the medieval period through the present. A major goal of the course is to examine how the West has viewed the samurai as well as how Japanese perceptions of the warrior have changed over time. The course concludes with an evaluation of the importance of the warrior ethic in contemporary Japanese business and politics. One unit.
History 295 - 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. One unit. European era. One unit.
The following seminars and colloquia are offered each semester as needed. The tutorials are offered as requested.
History 301 - Seminar in American History
An intensive research-oriented study, limited to 12 participants. One unit.
History 302 - Seminar in Latin American History
An intensive research-oriented study, limited to 12 participants. One unit.
History 303 - Seminar in Pre-Modern History
An intensive research-oriented study, limited to 12 participants. One unit.
History 304 - Seminar in Modern History
An intensive research-oriented study, limited to 12 participants. One unit.

## History 305 - Seminar in Asian History

An intensive research-oriented study, limited to 12 participants. One unit.

History 306 - Seminar in Historiography
An intensive research-oriented study, limited to 12 participants. One unit.
History 407 - Tutorial
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 408 - Tutorial
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. (This is not a continuation of 407.) One unit.

## History 409 - Colloquium

Limited to an enrollment of 12 students, this course emphasizes reading, discussion, and writing on a topic selected by the instructor. Three places are reserved for non-majors; preference will be given to students who have not already taken a colloquium. One unit.
History 410 - Colloquium
Limited to an enrollment of 12 students, this course emphasizes reading, discussion, and writing on a topic selected by the instructor. Three places are reserved for non-majors; preference will be given to students who have not already taken a colloquium. (This is not a continuation of 409.) One unit.
History 411 - Colloquium in American History
Limited to an enrollment of 12 students, this course emphasizes reading, discussion, and writing on a topic in American History. Three places are reserved for non-majors; preference will be given to students who have not already taken a colloquium. One unit.
History 412 - Colloquium in Latin American History
Limited to an enrollment of 12 students, this course emphasizes reading, discussion, and writing on a topic in Latin American History. Three places are reserved for non-majors; preference will be given to students who have not already taken a colloquium. One unit.

## History 413 - Colloquium in Pre-Modern History

Limited to an enrollment of 12 students, this course emphasizes reading, discussion, and writing on a topic in Pre-Modern History. Three places are reserved for non-majors; preference will be given to students who have not already taken a colloquium. One unit.
History 414 - Colloquium in Modern History
Limited to an enrollment of 12 students, this course emphasizes reading, discussion, and writing on a topic in Modern History. Three places are reserved for non-majors; preference will be given to students who have not already taken a colloquium. One unit.
History 415 - Colloquium in Asian History
Limited to an enrollment of 12 students, this course emphasizes reading, discussion, and writing on a topic in Asian History. Three places are reserved for non-majors; preference will be given to students who have not already taken a colloquium. One unit.
History 420, 421 - Fourth-Year Thesis
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. Two units.

# Mathematics and Computer Science 

Thomas E. Cecil, Ph.D., Professor and Chair
Peter Perkins, Ph.D., Professor
John T. Anderson, Ph.D., Associate Professor
David B. Damiano, Ph.D., Associate Professor
Alisa DeStefano, Ph.D., Associate Professor
Margaret N. Freije, Ph.D., Associate Professor and Assistant Dean
Deirdre Haskell, Ph.D., Associate Professor
John B. Little III, Ph.D., Associate Professor
Sharon Frechette, Ph.D. Assistant Professor
Andrew Hwang, Ph.D., Assistant Professor
Laurie A. Smith King, Ph.D., Assistant Professor
Constance S. Royden, Ph.D., Assistant Professor
Edward J. Soares, Ph.D., Assistant Professor
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 and a minor in computer science open to students majoring in any department, including mathematics. The mathematics major/computer science minor combination will replace the concentration in computer science offered previously. However, mathematics majors in the class of 2001 can still graduate with the concentration in computer science in the mathematics major as described in previous catalogs. Students who wish to pursue this option should consult with the Department Chair. Computing courses do not count toward the maximum number of courses which may be taken in one department for mathematics majors.

## Advanced Placement and Introductory Courses

Students who have earned one unit of advanced placement credit in mathematics and who wish to continue in mathematics will be placed in Mathematics 136, Advanced Placement Calculus. This course is also recommended for students who have successfully completed a year of calculus in high school but who did not take an advanced placement test or did not receive advanced placement credit. Successful completion of Mathematics 136 fulfills any college requirement for a full year of calculus. Students who earn two units of advanced placement credit will be placed in Mathematics 241, Multivariable Calculus, and may also consider enrolling in Mathematics 243, Algebraic Structures.

Students who earned AP credit and choose to enroll in Mathematics 125, 131, or 133 will forfeit all of the advanced placement credit. Students who earned two units of advanced placement credit and choose to enroll in Mathematics 132, 134, or 136 as their first mathematics course will lose one unit of credit.

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, 132.

## 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 upperdivision 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 Minor in Computer Science

The requirements for the computer science minor include seven courses 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 155 (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 required computer science courses are the Computer Science 161, 262 (Techniques of Programming-Data Structures) sequence, Computer Science 381 (Introduction to Computer Systems and Organization), and two additional 300 -level courses in computer science.

Interested students also may take advanced courses in computer science at WPI and Clark University 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 network of Sun workstations 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 certification, should consult with the Department Chair and with the Chair of the Department of Education 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.

## Departmental 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.
Course Requirements for Honors and High Honors in Mathematics with a Minor in Computer Science. In addition to completing the minimum requirements for the mathematics major and computer science minor, students must also complete one additional computer science course numbered above 300 .
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 this Honors Program should consult with the Departmental Honors Program director before leav ${ }^{-}$ ing 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.

## Courses

## Mathematics Courses

## Mathematics 110 - Topics in Mathematics

Consideration of diverse subjects in mathematics. Course content varies from semester to semester with specific subject matter for each course announced at preregistration. 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 terninal 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 onequarter units each semester.
Mathematics 136 -Advanced Placement Calculus
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
$\mathrm{An}_{\mathrm{n}}$ 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 $\mathrm{A}_{\mathrm{n}}$ 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. One unit.
Mathematics 244 - Linear Algebra Spring
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. One unit.

## Mathematics 301 - Topics in Geometry

Alternate years in fall
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. Breadth area: Geometry and Topology. One unit.
Mathematics 302 - Differential Geometry Alternate years in fall 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 formur las, smooth surfaces in 3 -space, fundamental forms, differentiable manifolds, vector fields, connections and a brief introduction to Riemannian geometry. Breadth area: Geometry and Topology. One unit.

## Mathematics 303 - Mathematical Models

Alternate years
Content may vary somewhat year to year, but in general the topics are selected from the modeling of discrete phenomena. After a brief introduction to the concept of modeling, such topics as linear programming, game theory, graph theory, network flows and combinatorics are studied. Breadth area: Applied Mathematics. One unit.

## Mathematics 304 - Ordinary Differential Equations

Alternate years in spring 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. Breadth area: Applied Mathematics. One unit.

## Mathematics 305 - Complex Analysis

Alternate years in spring
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. 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. 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. 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. Breadth area: Analysis. One unit each semester.

Mathematics 363 - Topics in Topology
Alternate years in spring
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. Breadth area: Geometry and Topology. One unit. 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. Beginning in 2000-2001, the combination Mathematics 371,372 will no longer satisfy the full-year linked sequence requirement for the Mathematics major. Breadth area: Analysis. One unit.

## Mathematics 372 - Numerical Linear Algebra <br> 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. Beginning in 2000-2001, the combination Mathematics 371,372 will no longer satisfy the full-year linked sequence requirement for the Mathematics major. 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. Beginning in 20002001, this couse will be offered in a full-year linked sequence beginning with Mathematics 304 (Ordinary Differential Equations). Breadth area: Applied Mathematics. One unit.
Mathematics 375, 376 - Probability and Statistics
Provides an introduction to the theory and applications of probability and statistics. Topics in prob-bability 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. 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. 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 150 - Introduction to Computer Science
Fall, spring
This course is a survey of the science and art of computing. The first half of the course is an introduction to computer programming using the Pascal programming language. Emphasis is placed upon language-independent topics such as structured programming, good programming style, the use of subprograms, and algorithm construction in general. The second 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 the interplay between technical issues and ethical questions. One unit.

Computer Science 155 - Discrete Structures Spring
An introduction to the discrete mathematical structures that form the basis of computer science: sets, mappings, relations, Boolean algebras and propositional logic, graphs and trees. Additional topics include induction and recursion, counting techniques, and probability. One unit.
Computer Science 161 - Techniques of Programming
An intensive introduction to object-oriented programming in $\mathrm{C}++$ for students considering further course work in computing. It is expected that most of the class will continue with Computer Science 262, Data Structures. One and one quarter units.
Computer Science 262 - Data Structures Spring Standard data structures such as stacks, lists, trees and graphs are introduced. Algorithms and techniques for sorting, searching, graph traversal, hashing and recursion are discussed. Analysis of algorithms and special topics are covered as time allows. One and one quarter units.
Computer Science 381 - Introduction to Computer Systems and Organization Annually Fundamental topics related to the design and operation of a modern computing system, including basic logic design, microcode, assembly language, program segmentation and linking, memory management, and multi-tasking. This course is a prerequisite for the other upper-division computer science courses, Computer Science 382, 383, 384. One unit.
Computer Science 382 - Principles of Programming Languages
Alternate years Discusses principles for designing and implementing programming languages reflecting a variety of programming styles. Specific topics include language syntax methods of processing a program, establishing the run-time environment of the program and programming language paradigms (especially the procedural functional, logic and object-oriented paradigms). One unit.
Computer Science 383 - Theory of Computation
Alternate years
Basic aspects of regular and context-free languages, propositional and predicate calculus, automata theory and computational complexity. One unit.

Computer Science 384 - 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, compiler design, operating systems, database systems, graphics, advanced theory of computation, and analysis of algorithms. 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 495, 496 - Computer Science Honors Thesis
Annually
See the description for Mathematics 495, 496.

## Modern Languages and Literatures

Isabel Alvarez Borland, Ph.D., Professor<br>Eckhard Bernstein, Ph.D., Professor<br>Theodore P. Fraser, Ph.D., Professor<br>Normand J. Lamoureux, Ph.D., Professor<br>Claudia Ross, Ph.D., Professor<br>Amy Singleton Adams, Ph.D., Associate Professor<br>Charles A. Baker, Ph.D., Associate Professor<br>M. Estrella Cibreiro-Couce, Ph.D., Associate Professor<br>John T. Cull, Ph.D., Associate Professor<br>Laurence Enjolras, Ph.D., Associate Professor<br>Lionel P. Honoré, S.J., Ph.D., Associate Professor<br>George N. Kostich, Ph.D., Associate Professor<br>Constance G. Schick, Ph.D., Associate Professor and Chair<br>Cynthia Stone, Ph.D., Associate Professor<br>Jorge H. Valdés, Ph.D., Associate Professor<br>Susan Amatangelo, Ph.D., Assistant Professor<br>Francisco Gago-Jover, Ph.D., Assistant Professor<br>Damian Rubino, Ph.D., Visiting Assistant Professor<br>E. Michael Papio, Ph.D., Assistant Professor<br>Kristina Sazaki, Ph.D., Assistant Professor<br>Miguel Cabañas, Cand. Ph.D., Instructor<br>Jutta Arend, Ph.D., Senior Lecturer<br>Esther L. Levine, M.A., Lecturer and Assistant Dean<br>Walter Zampieri, Cand. Ph.D., Lecturer<br>Ambroise Kom, Dr. d'Etat ès lettres, Eleanor Howard O'Leary Chair, Professor<br>Karen K. Sweetland-Dion, Cand. Ph.D., Visiting Instructor<br>Janine Fuller Hess, Cand. Ph.D., Visiting Instructor<br>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. While they are an integral and essential part of such international concentrations as

Asian Studies, German Studies, Latin-American Studies and Russian/Eastern Studies, they play a key role in the multicultural dimension of all majors and concentrations.

The department offers courses in Chinese, French, German, Italian, Russian, Spanish and foreign literatures in translation. Major programs, consisting of at least 10 semester courses on the intermediate level or above, are offered in French, German, and Russian. The Spanish major consists of at least 10 semester courses on the Composition and Conversation level or above. Students 'may incorporate Chinese language study in a major in Asian Studies. Minor programs are offered in French, German, and Russian. Students can also elect a Chinese language focus through a concentration in Asian Studies. These allow a student majoring in another field to add a strong cross-cultural foundation to that area of concentration. Students are assigned their own advisor within the department to make them aware of the College's many academic opportunities and help them devise their individual curriculum. They are encouraged to enrich and broaden their major programs by taking additional courses drawn from a wide range of humanistic and professionally ori-
ented areas. 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 European literatures. Courses are conducted in English and employ translated texts. The program is designed to introduce students to the best and most representative works in these literatures. Courses instruct students in approaches to textual interpretation, analysis, and criticism, as well as to an understanding of the cultural themes reflect-
ed in the respective works. Students are expected to develop a sufficient competence in at least one of the languages to assure a basic understanding of how that particular language works and how language works in general. These language courses also provide students the exposure to a specific culture necessary for a finer appreciation of the literature being studied.

Students interested in learning Spanish also have the option of participating in the Self-Paced Language Program. The elementary- and intermediate-level courses in this program 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 their professor frequently as well as attend weekly conversation classes with foreign language assistants.

All students, and modern-language majors in particular, are encouraged to avail themselves of study abroad opportunities. The College has its own programs at sites in Cameroon, China, France, Italy, Mexico and Spain, and actively promotes student participation in major study abroad pro grams all over the world.

## Courses

## American Sign Language and Deaf Studies

This curriculum is described under the Center for Interdisciplinary and Special Studies.

## Chinese

Major: Students may elect a multidisciplinary major in Asian Studies with a focus on Chinese language. Ten courses are required including Perspectives on Asia (History 103 or 104), a course in World Religions, Comparative Religions, Hinduism, Buddhism, or Islam, and eight additional courses incorporating significant Chinese language study.

Concentration: Students may elect a "China Track" within the Asian Studies/International Studies Concentration. 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 pro ${ }^{\circ}$ gram in Beijing. Prerequisite: three semesters of Chinese.

Chinese 101, 102 - Elementary Chinese 1, 2
An introduction to spoken Mandarin and written Chinese. Emphasis is placed on oral and written communication skills. Five class hours weekly and laboratory practice. 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. Emphasis on the consolidation of basic skills and the development of speaking and reading fluency. Five class hours weekly and laboratory practice. One and one-quarter units each semester.
Chinese 301, 302 - Third Year Chinese 1, 2 Annually Continued focus on the development of written and spoken communication skills, including an introduction to formal, literary Chinese. Five class hours weekly and laboratory practice. One and one-quarter units each semester.
Chinese 401, 402 - Fourth Year Chinese 1, $2 \quad$ Annually
The study and discussion of authentic Chinese texts. Emphasis on the building of oral and written fluency in Chinese. 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)
- French 302 (Introduction to French Literature)
- one course in French culture
- one French literature course from Middle Ages, Renaissance, 17th century or 18th century
- one French literature course from 19th or 20th century

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 would qualify for the minor, with prerequisites applying as stipulated. French courses taken in the Study Abroad programs would be counted toward the minor; however, minors who spend their third year abroad will be required to take at least three courses at Holy Cross including one in their fourth year.
French 101, 102 - Elementary French 1, 2
Annually
The aim of this course, designed for students with no previous study of French, is the acquisition of a basic speaking, reading, and writing knowledge of idiomatic French. Five class hours weekly and laboratory practice. One and one-quarter units each semester.
French 201, 202 - Intermediate French 1, 2
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 and laboratory practice. One unit each semester.
French 301 - Composition and Conversation
Fall
Designed for the student who wishes to gain pro
placed for the student who wishes to gain proficiency in oral and written French. Emphasis is
placed 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. Conducted in French. One unit.
French 302 - Introduction to French Literature
Spring
$\mathrm{A}_{\mathrm{n}}$ introduction to literary genres as well as to approaches to the analysis and interpretation of texts.
Prerequisite: French 301. Conducted in French. One unit.
French 303 - Contemporary France
Spring
This course 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: French 301. Conducted in French. One unit.
French 304 - Francophonie
Alternate years
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 marginaliza-
tions are among the topics analyzed and discussed. Prerequisite: French 302. Conducted in French. Othe unit.
French 362, 462 - Special Topics
Alternate years
A special course offered either semester for the study of a literary genre, form, theme or problem.
Conducted in French. One unit.
French 401 - Advanced Composition and Conversation
Annually
A course designed for students who have completed French 301 or its equivalent. Intensive prac-
tice of the four language skills. Conducted in French. One unit.
French 403 - Syntax
Alternate years

grammaticale and analyse logique. Prerequisite: French 301 or 401 . Conducted in French. One unit.
French 405 - Survey of French Literature I: the Middle Ages to 1800
Alternate years
A survey of the literary movements and an introduction to the major works and authors of the Condle Ages, the Renaissance, the 17th and the 18th centuries. Prerequisite: French 302. Conducted in French. One unit.

French 406 - Survey of French Literature II: the 19th and 20th Centuries Alternate years A survey of the literary movements and an introduction to the major works and authors of the 19th and 20th centuries. Prerequisite: French 302. Conducted in French. One unit.

French 411 - Seminar: French Poetry
Alternate years
A critical study of French prosody and poetic practice with an analysis of poetical works drawn from Villon to the present. Conducted in French. One unit.
French 413 - French Literature from the Middle Ages to the Renaissance Alternate years 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 Maittre Pathelin, Villon), and the major poets and prose writers of the Renaissance (including Rabelais, Du Bellay, Ronsard, Montaigne). Conducted in French. One unit.
French 415 - The Classical Theater and Its Aftermath
Alternate years Representative dramatic works of the 17th and 18th centuries are studied against the backgrounds of the dramatic theory from which they spring. The plays of Corneille, Molière and Racine are fear tured. Conducted in French. One unit.

## French 417 - 18th-Century French Literature

Alternate years
The course is an examination of the literature of the period as it relates to the changing social, incel lectual and literary values that led to the French Revolution and its consequences. Authors treated include Beaumarchais, Saint-Pierre, Laclos, Lesage, Marivaux, Prévost, Montesquieu, Rousseal, Diderot, Sedaine, Voltaire. Conducted in French. One unit.
French 419-19th-Century Novel
Alternate years
A close examination of the French novel from 1800 to 1900, including such authors as Constant Stendhal, Balzac, Flaubert, Maupassant, Huysmans, and Zola. Conducted in French. One unit.

French 421 - 20th-Century Theater
Alternate years
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. Conducted in French. One unit.

## French 423 - 20th-Century Novel

Alternate years
This course will explore the major literary movements which have marked the century up to the present. Authors studied include Gide, Proust, Sartre, Collette, Camus, Breton, De Beauvoir Beckett, Robbe-Grillet, Sarraute, Duras, Hyvrard, Modiano, Sollers, Wittig, Roche. Conducted ir French. One unit.
French 433 - Thème et Version Alternate year Through the translation of selected passages, this course seeks to teach students to write with pré cision and clarity in both French and English. Prerequisite: French 301 or 401 . Conducted in French. One unit.

French 491, 492 - Third-Year Tutorial
By arrangement
Eligible third-year students may elect one or both of these courses with the permission of the depart ment 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.
French 493, 494 - Fourth-Year Tutorial
By arrangement
Eligible fourth-year 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 encour' aged 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
A course 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, $2 \quad$ 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

Alternate years
The aim of the course is to explore the various forms of German resistance to Hitler during the
Third Reich (1933-1945) and to discuss 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 will be 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
Alternate years
The turbulent 14 years of the Weimar Republic (1919-1933) and the 12 years of the Third Reich (1933-1945) are the focus of this course. Though politically unstable, the Weimar Republic witnessed an unprecedented cultural flowering and the first truly modern culture. The second part of the course will deal 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
Altermate 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 Hister examines selected films made during that time as well as cinematic representations of the the Nazi past of their country. In English. One unit.
Cerman 301 - German Composition and Conversation Annually in 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.

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German 302 - Topics in Advanced German Language
Alternate years in spring Intensive study of a special aspect of the German language, such as business German, the craft of translation, and creative writing. Topics announced in the preceding semester. Prerequisite: German 202 or equivalent. One unit.
German 303 - German Culture: 1750-1890
Alternate years in spring An introduction to outstanding examples of German thought, ant, 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, aes' thetic 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 equiv* alent. 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, Büchner, Grillparzer, Droste-Hülshoff, Stifter, Keller, Meyer and Fontane. Readings and dis ${ }^{\prime}$ cussions 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 GermanPrerequisite: 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, BrechtReadings 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 decisionRecent 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
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 10 courses in Italian language, literature and cul-
ture beyond the elementary level and includes the following courses:

- Intermediate Italian (Italian 201, Italian 202) (2 semesters)
- Composition and Conversation (Italian 301)
- Dante (Italian 401)
- One course in Medieval and/or Renaissance literature (Italian 251, Italian 411)
- One course in 19th-and/or 20th-century literature (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 including cinema, Special Topics, and tutorials (taken either during the third or fourth year of study). Students may also take a maximum of two 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, a maximum of 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 junior 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.
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
This course provides a review of Italian grammar with an emphasis on oral and written communication. In addition, students will 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 251 - Renaissance Florence/History \& Literature Alternate years This course offers a close look at the life of the Florentines from the time of the Black Death to the remarkable social successes of the 1550s. Through readings of historical and literary texts, students will examine the lofty ideals of princes, poets, and philosophers as well as the apparently unsophisticated perspectives of merchants, laborers, and slaves. Conducted in English. One unit.
Italian 253 - Italian Women Writers
Alternate years
This course 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 discussed 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

This course studies the major trends in Italian cinema from the post-war Neo-Realist period to the present day. Films by directors such as Fellini, De Sica, Visconti, the Taviani brothers, Wertmuller, and Scola, among others, will be viewed and discussed. Conducted in English. One unit.

## Italian 301 - Italian Composition and Conversation

This course offers students intensive oral and written practice in Italian language through an explo ration 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. Conducted in Italian. Prerequisite: Italian 202 or equivalent. One unit.

Italian 362, 462 - 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 401 - Dante

Alternate years
This course 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 $14 \mathrm{th}, 15 \mathrm{th}$, and 16 th 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.
Italian 419 - 20th-Century Italian Novel
Alternate yeatrs
This course focuses on the novels, authors, and themes that define 20th-century Italian literature. Works by writers such as Italo Svevo, Alberto Moravia, Elsa Morante, Grazia Deledda, Italo Calvino, and Cesare Pavese, among others, will be studied. One unit.

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 polit ical, economic, social and cultural life resulting from the war. Authors studied include Carlo Levi, Primo Levi, Giorgio Bassani, Rosetta Loy, and Alberto Moravia. Conducted in Italian. One unit.
Italian 491, 492 - Third-Year Tutorial
By arrangement 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 ${ }^{2}$ given semester. One unit.
Italian 493, 494 - Fourth-Year Tutorial
By arrangement
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 ${ }^{\text {a }}$ given semester. One unit.

## Russian

The study of Russian language, literature and cultural history remains vitally important in today's changing world. Holy Cross offers students three ways to approach Russia on its own terms.

Russian major requirements: Russian majors take a minimum of 10 courses at the intermediate level or above. Majors are required to successfully complete Russian 201, 202 and Russian 301, 302 . Majors are also required to take four literature courses from among the wide array of offerings in Russian novel, drama, short story and poetry. Two of the four required literature courses must be selected from among those conducted in Russian. Students may count toward the major one of the following courses: Political Science 255, 256-Soviet Political Development, Soviet and Russian Politics, History 251, 252-History of Russian to 1905, 20th-century Russian or any Russian relat ${ }^{\text {- }}$ ed course offered by the Center for Interdisciplinary and Special Studies. The latter courses may not be taken in lieu of literature courses conducted in Russian. Students have the opportunity to study
and to participate in academic internship programs in Russia for major credit. Consult with Russian Program faculty on matters of placement and credit.

Russian minor requirements: Russian minors take six courses. Minors are required to successfully complete Russian 201 and 202 and four additional courses in Russian language, literature, or cuiture. Students' personal interests will dictate the distribution of these remaining courses. Consult with Russian Program faculty on matters of placement and minor credit.

Russian Track (International Studies Concentration) requirement: International Studies Concentrators may select the Russian track. These concentrators are required to take six courses on the intermediate level or above in Russian political science, history, language and literature. These six courses must be distributed among at least three departments. Students' personal interests will dictate the distribution of courses. Consult with the Center for Interdisciplinary and Special Studies for application and program information.
Russian 101, 102 - Speaking Russian in a Year 1, 2
Annually
This course promotes active communicative skills along with the basics of Russian grammar. By the end of the course a persevering student will be able to read, write, understand, and speak Russian in a broad range of everyday situations. Various aspects of Russian culture and life will be introduced through the medium of language. Five class hours weekly and language lab practice. One and onequarter units each semester.
Russian 201, 202 - Intermediate Russian: Language in Action 1, 2
Annually
This course is designed to activate the students' spoken Russian. Reading, discussion, and writing
activities provide dynamic applications for the language. Study of more complex aspects of Russian
grammar. Textbook and workbook are supplemented with audio tapes, video, and software.
Conducted in Russian. Prerequisite: Russian 102 or the equivalent. Five class hours weekly and lan-
guage lab practice. One and one-quarter units each semester.
$\mathrm{R}_{\text {ussian }} 251$ - Masterpieces of Russian Literature
Every third year
This course examines Russia's search for cultural identity in the 19th and 20th centuries. Focusing on works that best describe a "Russian Russia," this course considers how major literary themes address issues of identity in art, society, history and culture. Authors include Pushkin, Gogol, Goncharov, Zamiatin and Bulgakov. Conducted in English. One unit.
Russian 252 - Russian Short Story
Every third year
This course offers an opportunity to get acquainted with the most outstanding Russian writers and to read their masterpieces in the genre of the short stories. 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 exer-
cise in acting (voluntary). Conducted in English. One unit.
Russian 255 - 19th-Century Russian Literature
Every third year
This course uses works by Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky and Tolstoy to explore
the relationship between the literary family and attempts to liberalize 19th-century Russian society
in the era of Emancipation, the Great Reforms, the women's movement and revolutionary activity.
Themes include social justice, the monarchy, women's rights and the meaning of childhood. Taught in English. One unit.
Russian 257 - 20th-Century Russian Literature
Every third year
A survey of the turbulent 20th century that took Russian literature from the exhilaration of pre-rev-
olutionary 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 262, 362, 462 - Special Topics in Russian Literature

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 20th-century Russian poetry. Conducted in English or Russian. One unit.

## Russian 301, 302 - Russian Language Through Literature 1, 2 <br> Annually <br> This advanced language course uses 20 th-century Russian literature to accelerate students' speaking

 abilities, comprehension and writing skills. Supported by continued practice of grammar and sty $\mathrm{l}^{\text {lis }}$ tics, students read and discuss comic novel, The Twelve Chairs. Text supported by interactive software, video, and audio tapes. For purposes of major credit, this course cannot be considerd a lit erature course. Conducted in Russian. Prerequisite: Russian 202 or the equivalent. Four class hours weekly include writing laboratory with native speaker. One unit.
## Russian 303, 304 - Advanced Studies in Russian Culture 1, 2

Analysis of literary works and documentary materials with the aim of probing Russian cultural trax ditions, particularly in the 19th and 20th centuries. All discussions, readings and papers in RussianPrerequisite: Russian 302 and permission of instructor. One unit each semester.

## Russian 391, 491 - Third-Year Tutorial

By arrangement With permission of Department Chair and instructor only. For third-year students who wish to pur' sue work not covered by one of the regularly offered courses. One unit.
Russian 392, 492 - Fourth-Year Tutorial By arrangement
With permission of Department Chair and instructor only. For fourth-year students who wish to purs With permission of Department Chair and instructor only. For fourth-year students who wish to pur' sue work not covered by one of the regularly offered courses. One unit.

## Russian 402 - Parody and Satire in Russian Literature

Every third yeart This course examines the absurdity and injustice of the housing crisis of the 1920s 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 19 th centurl. Among the poets studied are Pushkin, Lermontov, Tyutchev, Fet, and Nekrasov. Lectures, discls' sions, and readings in Russian. One unit.
Russian 405 - Alexander Pushkin
Every third yed
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 Rusian 301 or the equivalent. One unit.

## Spanish

The Spanish major must complete 10 courses at the Composition and Conversation level or abover, including: Composition and Conversation (Spanish 301) or Composition for Bilingual Speakerf (Spanish 317); one semester of culture and civilization (regular offerings include Spanish 302 and 303-recommended for first- and second-year students-and Spanish 420, 421 and 422-recom mended for third- and 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 litery ture (Spanish 311 or 313); Advanced Compositon and Conversation (Spanish 315), Advanced Grammar (Spanish 316) or Spanish 318 (Phonetics and Phonology)-all are highly recommended; 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 take ${ }^{\text {n }}$ 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 programs in Spain (Seville and Palma de Mallorca) and in Mexico (Puebla). Changes in major take effect beginning with the Class of 2003.

Please note that the Classes of 2001 and 2002 will be able to count Intermediate Spanish 1 and 2 towards their 10 -course requirement.
Spanish 101, 102 - Elementary Spanish 1, 2
Fall, spring
$\mathrm{An}_{\mathrm{n}}$ intensive introduction to all elements of the Spanish language. Also included is a brief intro-
duction to the culture of the Hispanic World. Five class hours weekly and laboratory practice. One and one-quarter units each semester.
Spanish 105, 106 - Self-Paced Elementary Spanish 1, 2
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 - Self-Paced Intensive Elementary
Fall, spring
An intensive review of all of the topics covered in both Elementary Spanish 101 and 102. Requires that students be able to work independently with technology-based materials which help them direct their own 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 and laborato${ }^{17}$ practice. One unit each semester.
Spanish 215, 216 - Self-Paced 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.
$S_{\text {panish }} 301$ - Spanish Composition and Conversation
Fall, spring
( cor itse 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. The 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
A course 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
A course 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. Prerequisites: Spanish 301 or the equivalent. One unit.
$S_{\text {Panish }} 305$ - Introduction to Literary Genres
Fall, spring
Sesigned especially 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

 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 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.

## Spanish 316 - Advanced Spanish Grammar

Fall, spring
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 Annually

A course designed for bilingual students who speak Spanish at home but would like to improve their reading and writing skills. The course focuses on Latino issues through discussion and commentary of the works of contemporary Latino writers and film makers, with emphasis on using the lan-guage-reading and writing-rather than reviewing the grammar. The class is limited in size to enable students to receive individualized attention. Prerequisite: Intermediate Spanish or the equivalent. One unit.

## Spanish 318 - Special Topics: Phonetics and Phonology

Every third year This is a practice course for improvement of pronunciation and introduction to phonetic transcription. It is aimed at students with a desire to improve their pronunciation of Spanish, a wish to expand their knowledge of the various dialects of the language, and an interest in knowing how the sound system of Spanish works. Prerequisite: Spanish 305 and a semester of survey. One unit.

## Spanish 400 - Medieval Spanish Literature

Alternate years
Close reading, analysis, and discussion of representative works of medieval Spanish literature, including the jarchas, the Poema del Cid, El Conde Lucanor, El libro de buen amor, and La Celestina. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 310). One unit.

## Spanish 401 - Golden Age Literature

Alternate years Intensive study of the major authors of the 16 th and 17 th centuries. The course may include such authors as Garcilaso, San Juan de la Cruz, Cervantes, Lope de Vega, Quevedo, and Calderón. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 310). One unit.

## Spanish 402 - Don Quixote

Every third year 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. The 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
This course 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 - Modern Spanish and Spanish-American Poetry
Every third year
A study of representative works of Spanish and Spanish-American poetry from the last quarter of the 19 th century to the present. Both historical and analytical in its approach, the course examines the major poetic currents since modernismo and the "Generation of 1898 ," it studies the interaction between the poetry of Spain and Spanish America, and it familiarizes students with poetic theory. Among the authors studied are Rubén Dario, Antonio Machado, Federico García Lorca, and Pablo Neruda. Conducted in Spanish. Prerequisite: Spanish 305 and a semester of survey (preferably Spanish 311 or 313). One unit.

## Spanish 408 - Gabriel García Márquez <br> Every third Year

The course provides a general introduction and overview of García Márquez' writing career and ana-
lyzes some of his most notable novels. The aim of the course is to teach the students to read these
Works analytically in order to uncover the relationship between the aesthetic and the 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 - 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 will focus 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. The course explores how the experience of biculturality and dis-
placement 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 - Seminar in Hispanic Literature:
Latin American Literature of 19th Century
Every third year
This course examines the models for understanding the different cultural formations in the eman-
cipated ex-colonies of Spain. We will focus 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 420 - Latin-American Film
The principle objectives of this course are to serve as an introduction to film analysis, to study the development of the medium in Latin America, and to explore 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 and a semester of survey. One unit.

Spanish 421 - 20th-Century Spain through Film
Every third year
This course studies some of the most relevant historical, political, and social issues in 20th-century Spain as depicted through film. The course will focus 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 and a semester of survey. One unit.

Spanish 461 - Special Topics: 19th- and 20th-Century Spanish Female Voices Every third year This course will examine some of the most outstanding women writers of the 19th and 20th centuries of Spanish literature. We will explore the most prominent literary, social, cultural, and existential issues expressed in their works. These works will be studied in the context of the major trends of European literature in the past two centuries. Prerequisite: Spanish 305 and a semester of survey. One unit.
Spanish 491, 492 - Third-Year Tutorial
By arrangement 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
By arrangement
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 per semester.

## Studies in European Literature

Studies in European Literature courses are conducted in English and employ translated texts. They are open, without prerequisites, to all students of the College.

Requirements for the Studies in European Literature major: 10 courses specifically designated Studies in European Literature. In order to assure direct contact with texts in the original, a competence in at least one of the national languages of Europe is required. Students are therefore expected to take a minimum of two semesters beyond the intermediate level in French, German, Italian, Russian, or Spanish. The requirement may be fulfilled in Composition and Conversation courses, in advanced literature courses conducted in a foreign language, or in culture and civiliza ${ }^{-}$ tion courses conducted in a foreign language.

In addition to the courses listed below, STEL courses include the following cross-listed courses:
German 250-Metropolis Berlin
Italian 251-Renaissance Florence/History and Literature
Italian 253-Italian Women Writers
Italian 255-Italian Cinema
Italian 401-Dante
Russian 251-Masterpieces of Russian Literature
Russian 252-Russian Short Story
Russian 255-19th-Century Russian Literature
Russian 257-20th-Century Russian Literature
Studies in European Literature 201, 202 — Landmarks of European Literature 1, 2
Every third year
An introduction to major works of Continental literature, the course explores the works of at least six major authors each semester and serves as a basis for the advanced study of literature. One unit each semester.

Studies in European Literature 231 - The Age of Enlightenment
Every third year
A study of the literature of 18th-century Europe as it reflects the philosophical, cultural, and political aims of the Enlightenment. Among authors read are Shaftesbury, Pope, Montesquieu, Voltaire, Diderot, Rousseau, and Lessing. One unit.
Studies in European Literature 241, 242 - Special Topics in European Literature
Every third year
Offered periodically for the study of a literary genre, theme or problem. Recent topics have been:
The Image of Man in European Literature, Existentialism in European Literature, Contemporary
European Literature, Spanish Thought. One unit each semester.
Studies in European Literature 250 - Modern Religious Novelists
Every third year
The course studies representative works of modern novelists whose fiction deals substantially with
the relationship of God and human beings and religious concerns caused by God's perceived absence
or presence in the human community. Among authors read are: Unamuno, Kafka, Silone, Bernanos,
Mauriac, Greene, Waugh, Camus, Wiesel, Percy, Gordon, and Lodge. One unit.
Studies in European Literature 251, 252 - Major Authors Every third year
A course offered periodically for the study of one or more significant authors drawn from specific periods. Some recent topics: Franz Kafka, Hermann Hesse, Thomas Mann, Jean-Paul Sartre and Albert Camus. One unit each semester.
Studies in European Literature 253 - The Modern European Novel
Every third year
A study of the modern novel with an emphasis on the most significant approaches to form and technique. Among authors read are Gide, Mann, Musil, Kafka, Malraux, Silone, Sartre, Camus, Grass, Robbe-Grillet, and Böll. One unit.
Studies in European Literature 260 - Cinema and Humanism
Fall, spring
The course will investigate the cultural and historical significance of the films studied: the way in
which film treats and communicates philosophical, sociological, theological and historical themes and values. The director's view of the world will also be examined. One unit.
Studies in European Literature 263 - French Cinema
Spring
Films will be studied for their cultural and humanistic contents and significance, not only in reference to French society, but also as they deal with ethical dilemmas and human values of universal application. Attention will also be given to cinematographic technique and to the vision of such important French directors as Renoir, Cocteau, Truffaut, Malle, Godard, Chabrol, Techine and others. One unit.
Studies in European Literature 265 - Existentialism in Literature
Alternate years
The course 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 European Literature 267 - Introduction to Postcolonial Theory Annually Contacts between Europe and the rest of the world, between colonizers and colonized people engendered profound social, cultural, economical, political and psychological transformations. The course will consist of a comparative examination and discussion of major ideas put forward by intel-
lectuals who adopt a "Third World" perspective: Said, Fanon, Achebe, Ngugi, Spivak, Brathwaite,
Babha and many others. One unit.

## Music

Shirish Korde, M.M., Rev. John E. Brooks, S.J., Chair in the Humanities, Professor and Chair<br>Osvaldo Golijov, Ph.D., Associate Professor<br>Carol Lieberman, D.M.A., Associate Professor<br>Emma Tahmizian, M.M., Assistant Professor<br>Jessica Waldoff, Ph.D., Assistant Professor<br>James David Christie, M.M., Distinguished Artist in Residence; Director, Schola Cantorum<br>Melvin Chen, Cand. Ph.D., Lecturer, piano<br>Joel Cohen, B.M., Lecturer, cello<br>Nym Cooke, Ph.D., Lecturer<br>Eric Culver, D.M.A., Lecturer; Director, Chamber Orchestra and Brass Ensemble<br>John Emery, B.A., Lecturer, violin/viola<br>Peggy Friedland, M.M., Lecturer, flute<br>Marian C. Hanshaw, M.M., Lecturer, piano<br>Jane Harrison, B.M., Lecturer, oboe<br>Bruce Hopkins, M.M., Lecturer, trumpet/trombone<br>Elizabeth Keusch, M.M., Lecturer, voice<br>Andrew C. McGraw, Cand. Ph.D., Lecturer, Gamelan<br>Bruce I. Miller, M.M., Lecturer; Director, College Choir and Chamber Singers<br>Michael Monaghan, M.A., Lecturer; Director, Jazz Ensemble<br>Robert Schulz, M.M., Lecturer, percussion<br>Robert Sullivan, Lecturer, guitar<br>Paul Surapine, B.M., Lecturer, clarinet<br>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.

The major in music consists of a minimum of 10 courses. 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 towards the major. Students who do not wish to enroll in the Performance Program of the College may meet the performance requirement for the major by participating in any one of the performing organizations of the College listed below for at least two semesters with the permission of the Department Chair.

The Department offers two merit scholarships annually. 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 every other year alternating between full- and half-tuition, 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 sightreading. Candidates should address inquiries to Prof. James David Christie, Music Department, College of the Holy Cross, Worcester, MA 01610. Deadline for submission of scholarship application is January 15th.

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; music notation workstations; and a variety of traditional instruments. All 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.

## 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 teacher. 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 will register for Performance as a fourth course with a letter grade. Students may only claim a maximum of two units with letter grade towards graduation. A semester fee is charged, to be paid to the secretary of the Music Department by October 1 (Fall) and by February 15 (Spring). 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 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 in the semester at recitals sponsored by the Department.

The Department sponsors student recitals and also encourages participation in the following per-
forming organizations: Holy Cross Chamber Orchestra, Holy Cross Brass Ensemble, Holy Cross Jazz Ensemble, Holy Cross Choir, Holy Cross Chamber Singers, Crusader Marching and Pep Band, Gamelan and the Schola Cantorum.

## Courses

Music 101 - Introduction to Music Fall, spring
A one-semester listening course for students without any previous musical knowledge. It introduces the elements of music and examines their use in the principal forms and styles of Western and nonWestern music through a study of representative works by major composers. One unit.
Music 103 - Fundamentals of Music
Fall, spring
Introductory theory (notation, scales, intervals, chords, rhythm and meter) and basic musicianship (keyboard skills, score-reading and ear training). One unit.
Music 110 - College Choir
Both semesters
The study and performance of works for mixed chorus. Two or three major concerts per year, often
with orchestral accompaniment. No previous musical training or choral experience is required, but
students are given instruction in the rudiments of reading music and ear training. Prerequisites: per-
mission of instructor (audition). Must be taken on a Pass/No Pass basis and in two consecutive
semesters. Does not count toward the 32 courses required for graduation. One-half unit.
Music 142 - American Popular Song
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 151 - World Music

Alternate years
Introduction to music of selected African, Asian and American cultures. Each culture is approached through: 1) social and cultural context; 2) theoretical systems and musical instruments; 3) major musical and theatrical genres. One unit.
Music 160 - Introduction to Electronic Music

## Alternate years

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 syn thesizers 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 170 - Special Topics Annually
Topics include Introduction to Composition, Jazz: A Historical Survey, Music of Bali, and Gamelan. One unit each semester.
Music 201, 202 - Theory of Music 1, 2
Annually
A two-semester intermediate theory sequence of the materials of modal and tonal music: elementary counterpoint, harmony, and analysis. The course is designed to develop musical skills and theoretical concepts (voice-leading, harmonization of melodies, figured bass, etc.) which underlie performance, analysis, and composition. Prerequisite: Fundamentals of Music or equivalent background. One unit each semester.
Music 211 - History of Western Music 1
Fall
Historical development of musical styles from the ninth to the middle of the 18th century. Surveys major composers and genres of the Middle Ages, Renaissance, and Baroque periods (i.e., from Gregorian Chant through J.S. Bach). Prerequisite: the ability to read music. One unit.

## Music 212 - History of Western Music 2

Spring
Historical development of musical styles from 1750 to the 20th century. A survey of major composers and genres of the Classic, Romantic, and Modern periods (i.e., from Scarlatti through Stravinsky). 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, design and music for the pipe organ 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 the major composers of this century, illustrating their new compositional techniques and their 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). The course also includes selected readings of 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 as reflected in the chamber music, piano sonatas, and symphonies of Haydn and Beethoven, and in the operas and concertos of Mozart. Special emphasis is placed on those stylistic features that represent a continuation of the classical tradition and those that point the way to the revolution in musical thought in the 20th century. 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 18 th century. Works for analy , sis are drawn from the music of such composers as Monteverdi, Schuetz, Vivaldi, Handel, J.S. Bach and F. Couperin. Prerequisite: ability to read music, or permission of instructor. One unit.

Music 217 - Music of the Medieval/Renaissance Era
Alternate years
The study of the development of Western music, both sacred and secular, from Gregorian Chant to the Polyphonic Mass, motet and madrigal of the 16 th century. Prerequisite: ability to read music, or permission of instructor. One unit.
Music 218 - Jazz/Improvisation 1
This course will introduce sudents to the fundamentals of jazz harmony and improvisation. Topics
This course will introduce 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 will be applied to the analysis and performance of standard jazz tunes. This course will emphasize aural training through specific identification exercises. A portion of the class will be devoted to performance and improvisation with each member of the class having the opportunity to perform on their own instruments. One unit.
Music 219 - Jazz/Improvisation 2
Examination and analysis of contemporary jazz improvisation techniques. Modern harmonics, chord
studies, and modal playing will be discussed. Students will be 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
Exploration of the repertoire, forms, aesthetics, and social contexts of 19th-century European art music, as well as its relationships with poetry, drama, the visual arts and philosophy. One unit.
Music 225 - Tutorial
Annually
Tutorials in Computer Music, Conducting, Music History, Great Composers and Jazz. By arrange-
ment. One unit each semester.
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) and of the age in which he lived. Attention is paid to the development of his musical
style, the socio-cultural context in which he worked, the contemporary reaction to his music, and
the evaluation of his achievement by posterity. One unit each semester.
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 17 th-century
Concerto Grosso to the Solo Concerto of the 20th century. Examples include the Brandenburg
Concertos of J.S. Bach, the solo piano and violin concertos of Mozart and Beethoven, and selected works of Brahms, Liszt, Rachmaninov and Bartok. One unit.
Music 252 - Symphony
Alternate years
Introduction to the orchestra, its instruments and its repertory from the inception of public concerts in the 18th century to the present day. One unit.
Music 254 — Music for Keyboard
Alternate years
A survey of representative works for keyboard instruments (organ, harpsichord, clavichord, fortepi-
ano and the modern piano) from the 17 th century to the present. The history and role of
synthesizers will be explored. The contexts of keyboards in religion, in the orchestra, in chamber
ensembles, the home, concert halls and in jazz will be studied. 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 will focus 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 17 th century to the present which 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) will be studied. One unit.
Music 270 - Special Topics
Topics include Piano Literature in the Romantic Era, Survey of African American Music, and India: Religion/Music/Visual Art. One unit each semester.
Music 301, 302 - Theory 3, 4
Annually
Semester 1 emphasizes analysis of tonal music through the study of representative works of such composers as Bach, Haydn, Mozart, Beethoven, and Brahms. Semester 2 focuses on 20th-century musical systems through the study of compositional theory and the analysis of selected works of 20th-century composers. This advanced theory sequence also includes original compositionPrerequisite: Theory 2 . One unit each semester.
Music 303 - Theory of Music 5
Theory 5 will offer advanced theoretical studies for students who have completed the Theory $1-4$ sequence. Theory 5 will be especially valuable for those students desiring to pursue graduate studies in musicology or theory/composition. It represents the logical next step between the study of the principles of harmony and counterpoint, and their practical application. One unit.

## Music 325 - Tutorial Annually

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

## Music 331, 332 - Performance <br> Both semesters

Instrumental or vocal lessons for students of intermediate competency. Interested students must consult with the Chair of the Department. One unit.

## Music 370 - Special Topics

Annually
Topics include. Advanced Composition and Analysis. One unit each semester.
Music 400 - Fourth-Year Seminar Spring
The Fourth-year Seminar is designed to integrate the three areas of music: History, Theory and Performance. Required for music majors. Topics are 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 will center on historical and analytical method, recent trends in scholarship, and historiography. Position papers and class pre' sentations will be assigned. Prerequisites: Music 202. One unit.

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

# Naval Science 

CAPT Daniel J. Brennock, USN, M.A., Professor and Chair
CDR Jo-Ann M.T. Stone, USN, M.A., Lecturer
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 NROTC Program. This affirmation should 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, all textbooks, military uniforms, and a $\$ 200$ per month subsistence allowance while attending college. Holy Cross offers free room or board to all four-year national scholarship winners. They are required to take certain college courses, undergo three summer training cruises, each of four to six weeks' 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, all textbooks, military uniforms, and a $\$ 200$ per month subsistence allowance. 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 to six 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 3.0 or higher and 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 Chief of Naval Education and Training Controlled Scholarship. The scholarship includes full tuition, all books and fees, military uniforms and a subsistence allowance of $\$ 200$ per month.

College Program students not selected for a scholarship by the beginning of their junior year must be selected for advanced standing or be dropped from the NROTC program. A minimum 2.5 GPA is required to be granted advanced standing status. This program provides military uniforms and a subsistence allowance of $\$ 200$ per month while attending college. College Program students are required to take certain college courses and to undergo one summer training cruise of four to six - 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 $\mathrm{P}_{\text {rogram }}$, students are required to serve at least three years on active dury.

## 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 perir ods once a week. In addition, each year the battalion sponsors an active social program which includes a spaghetti dinner; the Navy Marine Corps Birthday Ball; Dining In; Cotillion; and drill, basketball, sailing and military excellence competitions; and field meets.

## Courses

## Naval Science 111 - Naval Orientation

 A non-credit course, presented as 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.
## Naval Science 112 - Naval Ship Systems 1

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 tur' bine, and nuclear propulsion. Also discussed are shipboard safety and fire fighting. No degree credit; required of all Navy option midshipmen.
Naval Science 113 - Naval Ship Systems 2
An introduction to the principles and behavior of electronic and electromagnetic systems to pro ${ }^{\prime}$ vide 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, com ${ }^{\prime}$ munications, electro-optics, computer, missiles and electronics warfare systems. No degree credit; required of all Navy option midshipmen.

## Naval Science 114 - Sea Power <br> Spring

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.

## Naval Science 141 - Navigation 1

Practical piloting in restricted and open waters to include discussions on tides, currents, electronic and celestial navigation aids. Coast Guard Navigation Rules and a brief introduction to weather will also be covered. No degree credit; required of all Navy option midshipmen.
Naval Science 142 - Navigation 2
An introductory course to the procedures used in Naval Operations and Naval Shiphandling. Includes: Maneuvering Board Concepts, Rules of the Road and basic ship-handling. No degree cred it; required of all Navy option midshipmen.

## 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 milir tary 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

This course focuses on the basic 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 dis' cussed. One unit; required of all midshipmen.

This course focuses on further exploring the moral and ethical responsibilities of a successful military officer. It includes case studies of ethical dilemmas and moral reasoning in a military setting. This course also includes the study of Navy and Marine Corps Officer administrative responsibilities. The course exposes the student to a study of counseling methods, military justice administration, naval human resources management, directives and correspondence, naval personnel administration, material management and maintenance, and supply systems. 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.
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 100 - Naval Science Lab
Fall, spring
Naval Science Laboratory. A weekly two-hour laboratory. Emphasis is placed on professional train
ing 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, cruise evaluation, sail training,
safery 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 Chief of Naval Education
and Training or the Professor of Naval Science. No degree credit; required of all midshipmen.

## Philosophy

Hanna Buczynska-Garewicz, Ph.D., Professor
Lawrence E. Cahoone, Ph.D., Associate Professor
Predrag Cicovacki, Ph.D., Associate Professor
Christopher A. Dustin, Ph.D., Associate Pro
Professor and Chair
Joseph P. Lawrence, Ph.D., Associate Professor
Karsten R. Stueber, Ph.D., Associate Professor
Jeffrey Bloechl, Ph.D., Assistant Professor
William E. Stempsey, S.J., M.D., Ph.D., Assistant Professor
Justin Sudarminta, S.J., Visiting International Jesuit Scholar, Visiting Professor
Philosophy is concerned with fundamental questions about the meaning of reality; the foundations
-of science, morality and aesthetics; and the nature and scope of human knowledge. Philosophy is in
fact the meeting place for all disciplines, for any discipline becomes philosophical once it begins seriously to examine its own methodology and foundational presuppositions. The study of philosophy is therefore to be 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 for all students interested in deepening their humanistic culture,
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. Courses in non-Western philosophy are also offered. The historical courses are best pursued in conjunction with more systematic courses. Philosophy is much more than the acquisition of a certain kind of knowledge. It is the ability to think reflectively about problems at the root of what might appear as self-evident.

Courses exclusively reserved for first-year students are: all sections of Themes (Phil 110) and the Intensive First-year Seminars (Phil 130). Students are permitted to take only one Themes course or ${ }^{\text {One }}$ First-Year Intensive Seminar. Philosophy 120 (Themes) is for second-year students only.

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Second-, third-, and fourth-year students can fulfill the college distribution requirement in philosophy by choosing any course in the 200-299 range that does not have special prerequisites.

To its majors and minors, the department offers a program that combines necessary structure with the freedom to follow an individually oriented course of study. Advisors in the department, chosen when students decide upon the major or minor, will give individual advice and help with the selection of courses before and during preregistration.

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. Minors in philosophy are required to take a minimum of six courses in philosophy. Only one of these may be at an introductory level. Of the six courses, at least one has to be at an advanced (300) level. The course selection will be determined in consultation with the student's advisor in philosophy.

Each major must take a course in logic. The major is also required, in consultation with his or her advisor, 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 history of philosophy.

Required courses may be taken at either the intermediate or the advanced level. As a general rule, students are urged to build a strong foundation of intermediate courses before progressing to the advanced courses. At least three courses have to be taken on the advanced level. These courses may (or may not) be used to satisfy the systematic and historical distribution requirements.

In addition to a wide range of regular courses and seminars, the Department offers a number of tutorials and opportunities for independent study. Accomplished students are urged to use these opportunities to complete their studies by writing a fourth-year thesis and giving a public presentation of its main conclusions.

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 may 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. (See Philosophy 497 below.)

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 - Themes
A one-semester consideration of specific themes in philosophy specifically designed for first-year students. Students will be introduced to philosophical thinking, as well as to reading and writing carefully about philosophical topics. Themes will vary from section to section and from year to year. One unit.

Philosophy 120 - Themes
Fall, spring
A one-semester consideration of specific themes in philosophy specifically designed for second-year students. Students will be introduced to philosophical thinking, as well as to reading and writing carefully about philosophical topics. Themes will vary from section to section and from year to yearOne unit.

Philosophy 130 - Intensive First-Year Seminar
Fall, spring
A one-semester seminar specifically designed for highly motivated first-year students. Enrollment will be limited to accommodate the critical discussions and intensive work that a seminar format requires. One unit.

## Intermediate Courses

## Philosophy 201 - Metaphysics

Spring
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 meta-
physics 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 clas-
sical 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.
Philosophy 204 - Ethics
Alternate years
An examination of the attempts to arrive at the foundations of ethics. Emphasis is placed on the
continuity in the development and refinement of these attempts historically, so that contemporary
moral problems and their proposed solutions may be seen in proper perspective. One unit.
Philosophy 205 - Ethics and the Natural World
Fall
Ethics is sometimes construed as Reason's attempt to find within itself normative rules not only for governing human behavior but for ruling over the external world as well. But by giving more careful consideration to humanity's place within the natural world, this notion of ethics undergoes a significant alteration. Aristotle, Thoreau and Heidegger will help us discern the possibility of receiving ethical guidance from nature rather than taking our ethical views as the basis for managing and controlling nature. One unit.
Philosophy 207 - Foundations of Ethics
Fall, spring
In this course, we shall consider various challenges to the claims of morality. We shall also consider 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 objec-
tivity of value, relativism, conflicts of obligation, the idea of moral "truth," and the sources and
ultimate value of morality itself. We shall think about how these issues come to life in classical texts,
and about how they are treated in recent philosophical literature. Our 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
Fall
The course presents philosophical reflections on human knowledge. It is focused on clarifying the
following questions: What can we know? What is truth? How do we obtain true knowledge? Is the
world itself similar to what we perceive it to be? What is an object of knowledge? What is the func-
tion of language in knowing? What is thinking? Readings will include Plato, Aristotle, Hume, Kant
and others. One unit.
Philosophy 215 - Introductory Logic
Fall, spring
This course is an introductory study of the formal structure of reasoning patterns such as deduction.
It includes an introduction to formal languages, sentential calculus, predicate calculus, and an inves-
tigation into logic's value and limits. One unit.
$\cdot$ Philosophy 222 -Critical Thinking
This is a joint effort to practice reasonable, reflective thinking focused on accepting or rejecting or
suspending judgment on statements thus committing to or rejecting courses of action. First, we will
reflect critically on unsupported statements, stressing their need for clarity and precision of mean-
ing as well as learning the criteria for evaluating such statements. Secondly, we turn our attention
to statements supported by reasons, i.e., embedded as conclusions of arguments, whether deductive
or inductive, and their related fallacies. Since this course involves Socratic questioning and active student participation in discussions and prepared arguments, both full attendance and faithful preparation are essential. One unit.

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methodological reflections will be the central issues. Other topics will also be considered, especially Plato's political philosophy, Aristotle's moral philosophy, and the fundamental epistemological, theological and linguistic problems of how human beings can talk about God. One unit.

## Philosophy 230 - Medieval Philosophy

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 will be presented. One unit.

## Philosophy 235 - Early Modern Philosophy

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 will also be given to the thought of those opposing idealism, especially Marx and Kierkegaard. 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 244 - Contemporary European Philosophy

Altermate years
The course covers the last hundred years in the history of philosophy. It will deal in part with: Logical positivism/analytical philosophy; Phenomenology; Existentialism; Marxism; and PostModernism. Topics considered will include basic ontological, epistemological, and moral problems of the contemporary world. One unit.
Philosophy 245 - Phenomenology
Alternate years
This course will explore the motivation and the methods of phenomenological philosophy. The focus will be on Husserl's development of phenomenology as a "rigorous science," and its critical revision. Topics will 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 will include works by Husserl, Sartre, Merleau-Ponty, and others. One unit.

## Philosophy 246 - Philosophy and Literature

This course will explore the relationship between philosophy and literature. It will reveal the enormous impact of philosophy on literary texts and will try to show how philosophy is present in all forms of intellectual life. It will also try to take seriously literature's claim to be doing something that philosophy itself cannot do. The authors chosen will vary, but will include such figures as Shakespeare, Goethe, Nietzsche, Thomas Mann and Proust. One unit.

## Philosophy 250 - Medical Ethics

Fall
This course will examine topics of current interest in biomedical ethics, and the role moral philosophy plays in public debate about controversial issues. The aim is to help students think, speak, and write clearly about these issues. It will begin with a discussion of moral justification and an overview of several types of ethical theory. It will then consider 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

Eastern traditions. Christian and Buddhist texts will also be investigated in an attempt to show how the sharp polarity between Eastern and Western thought emerged. One unit.
Philosophy 260 - Aesthetics
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
Alternate years
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. In the course different traditional and contemporary themes about the nature of the mind will be discussed critically. The discussion will emphasize 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 will try to evaluate this kind of philosophizing through a systematic analysis of the philosophical project of a theory of meaning in its historical development. Readings will include texts of Frege, Carnap, Quine, Davidson, Dummett, and Wittgenstein. One unit.
Philosophy 264 - Philosophy of History
The course flernate Years The course focuses on the growth of historical consciousness in the modern epoch, although it may also give attention to such Christian thinkers as Augustine. In any event, it will lay greatest emphasis on 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 who will typically be read include Kant, Herder, Burckhardt, Nietzsche, Löwith, and Collingwood. One unit.
Philosophy 265 - Political Philosophy
Alternate years Plato, Aristotle, Augustine, Rousseau and Nietzsche are among the handful of great philosophers who have left an equally lasting and profound impact on political theory. This course will set out to study one of these thinkers in depth, trying to understand the interplay between their fundamental insights into human existence and the political model that was derived from this vision. Supplementary readings will consider other important works which have been influenced by this seminar figure. One unit.
Philosophy 267 - Philosophy of State and Law Fall
This course will undertake ate This course will undertake a study of such problems as the nature and purpose of the state, the justification of political power and authority, the connection between legality and morality, legal and moral rights and obligations, and the nature of justice, as seen from the perspective of important classical texts in Western philosophical and political thought. This course will begin with a look at some issues in our contemporary social and political milieu, in order to place these questions in context. We will then turn to the history of philosophy to see how philosophers from various traditions have answered these questions. Our aim will be to understand the philosophical origins of the prevailing, competing lines of thought in political philosophy, with a view toward formulating our own independent answers to these questions. One unit.

## Philosophy 269 - Philosophy of Law

Alternate years
This course examines the nature of law and the place of law in human society. It will consider the history of rule by law and reflect upon its value. Theories of law and of the relation of law to moral ity 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 con' cepts as equality, freedom of speech, evidence, obligation, rights, punishment, and justice. One unit.

## Philosophy 271 - Philosophy of Science <br> 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 will also investigate 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 philo sophical 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 will explore some of the theoretical and con' ceptual issues that form the basis for medical knowledge and thus influence the practice of medicineTopics to be considered 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 277 - Philosophical Perspectives on Women

Alternate years
This course surveys the classic literature of Western philosophical views on women and the femir nist response to it. Attention is given 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 An exploration of 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
The first half of the course will provide a quick survey of the main issues dealt with by the philos $0^{\circ}$ phy of religion-the existence of God, the problem of evil, the nature of religious faith, the nature and fate of the human soul. The readings for this part of the course will be selected from philosophers such as Thomas Aquinas and David Hume. The second half of the course will involve a philosoph ical reading of Holy Scripture. Selections will be from the Bible and the Bhagavad Gita. One unit.

## Philosophy 285 - Philosophy of Mythology

Alternate years
This course will examine both philosophy's ground in mythical thinking and the tension that aris' es between the two spheres. Themes will 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
What is "classicism," and what makes this question worth asking? Enlightenment culture-our modern culture-is supposed to have liberated itself from ancient world-views. That is how "moder" nity" is defined. But it still expresses itself in classical terms. Take a walk around the campus and count the columns! 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 explanation. We shall start by trying to gain a deeper understanding of
what "classicism" is all about, and go on to explore its recurrent manifestations in Enlightenment art and thought. Order and disorder, freedom and desire, harmony and dissonance, individuality and the whole, unity and disunity, tragedy and reconciliation, nature and reason, how we conceive of ourselves in relation to the broad structure of reality-these are some of the themes we shall focus on. One unit.
Philosophy 287 - The Philosophy of Architecture
Philosophy 287 - The Philosophy of Architecture
More than any other art, architecture shapes our environment and the way we live. This raises seri-
Ous and ous 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 is to dwell. Such questions lie at the intersection of art and philosophy. These and related questions are the focus of this course. In addition to readings from traditional and contemporary literature in aesthetics and architectural theory, we shall reflect on these issues by looking at and responding to architectural examples. We shall study the philosophy of architecture by studying architecture philosophically. The goal is to reach a deeper understanding of architecture and of the role it plays in our lives. One unit.

## Philosophy 288 - Death

Alternate years
The course has two primary concerns. The first is to explore 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? The second and most important purpose of the course is transformative rather than theoretical: how can we ourselves most effectively prepare ourselves for the deaths we will one day encounter? The image of
$\mathrm{S}_{\text {ocrate }}$ Socrates, who faces his own death with supreme courage, serves as a model for the "philosophical" relationship to death. The readings for this course will vary, but will typically include Heidegger's Being and Time and Plato's Phaedo. Texts from Eastern Philosophy will 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 will examine ethical, philosophical, and public policy dimensions of
death and dying. Topics to be considered include the definition of death, truth-telling with dying
patients, suicide, euthanasia, deciding to forgo life-sustaining treatment, decisions on behalf of chil-
dren and incompetent adults, the debate about futile care, and public policy issues. One unit.
Philosophy 290 - Knowledge of the Self
Alternative Years
Reflections about the self and subjectivity are at the center of modern thought. 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 will address
the central ontological and epistemological problems associated with the problem of self-knowledge.
Authors to be studied include, among others, Descartes, Hume, Kant, Wittgenstein, Sartre, James,
and Shoemaker. One unit.

- Philosophy 293 - Seminar: Moral Reasoning

Alternate years
A critical study of ethical discourse, particularly of what is ordinarily referred to as "moral reason-
ing." This will involve a brief study of some major normative and metaethical theories as well as
certain common fallacies of moral reasoning. Emphasis will be placed on student participation in
prepared oral presentations and open discussions which will center around their own reasoning
about contemporary moral problems. The meetings will be conducted by student-initiated discus-
sions, Socratic questioning and micro-lectures; hence there will be extensive readings and various
course resources such as books, video and audio tapes, and easily accessible data on our Web site.
One unit.

## Advanced Courses

Philosophy 301 - Seminar: Language and Thought
Alternate years
Central themes of this study are the interdependence of language and thought, the resulting linsuistic and conceptual relativity, and the critical function of linguistic analysis as critique of

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cognition, as well as its expected therapeutic effect in overcoming pseudo-problems in philosophy. Main focus will be on 19th-century philosophers under the dual influence of the British empiricists and Kant and their anticipation of important features of 20th-century philosophy, especially that of Wittgenstein. One unit.

## Philosophy 302 - Seminar: Philosophy of Psychology

This course will address long-standing philosophical issues concerning the foundations of psycho $0^{\circ}$ logical research. It will discuss 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
Is it possible to study and explain human actions and human affairs using the methods of the natu' ral sciences? Or does the study of human beings require its own methodology because human beings have thoughts, a free will, and can behave rationally? The course will try 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 - Seminar: Problems in Metaphysics

Alternate years How is it possible to think Being without doing violence to its transcendence? The principal text will be Heidegger's Being and Time, but other works of the early Heidegger will be read, as well as works of Husserl. One unit.

## Philosophy 308 - Seminar: Epistemology

Alternate years
The seminar presents philosophical reflection on human knowledge. Its main subject is intersub jectivity. The discussion will be focused on language and thinking. Philosophers discussed in class are Husserl, Heidegger, and Wittgenstein. One unit.

## Philosophy 316 - Seminar: Problems in Aesthetics

Alternate years
Selected aesthetic problems explored in depth. While Aesthetics (Philosophy 260) is not a specific prerequisite for enrollment in this course, some acquaintance with the literature of philosophy and/or the arts is desirable. One unit.

Philosophy 332 - Seminar: Problems in Phenomenology
Altermate years
An intensive investigation of the question of rationality and meaning. The course will be focused on the ontological status of meaning (ideal object, intentional object, act of mind) and on the crit ${ }^{\text {b }}$ icism of psychologism. Phenomenology, hermeneutics and deconstruction will be discussed. Authors studied in class are Husserl, Ingarden, Heidegger, Ricoeur, and Derrida. One unit.

## Philosophy 334 - Hermeneutics

Alternate years
A study of the theory of interpretation as constitutive of human knowing and action. The course examines classical and contemporary theories about interpretation, but also demands that the par' ticipants enter the practice of hermeneutics in an effort to understand selected difficulties of the modern and contemporary world. One unit.
Philosophy 350 - Seminar: Pre-Socratic Philosophy
Alternate years
This course will study the origin of Western philosophy and science before Socrates. It will investí, gate the relationship between myth and philosophy, the development of various schools of philosophy (Pythagoreans, Eleatics), and conclude with a discussion of the sophists. Emphasis will be placed upon the study of the texts of Pre-Socratic philosophers and the interpretations of mod ern scholars. One unit.
Philosophy 354 - Plato
An introduction to the philosophy of Plato: his dispute with the sophists and the development of the theory of Ideas, the consequences of his theory for his understanding of the life of the soul in terms of love and knowledge, and his last critical reflections on his own major dialogues. One unit.

Philosophy 358 - Seminar: Aristotle
An intense examination and overview of the major philosophical projects of the Philosopher. The goal of the course is to give the student both a detailed grasp of Aristotle's major works and an appreciation of the relation of Aristotle's philosophical contributions to problems and questions raised by his teacher, Plato. Works to be studied include: Categories, Physics, Metaphysics, Politics, Rhetoric, and Poetics. 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. Throughout the semester, the focus will be 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 will typically focus 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
${ }^{\text {A reading course in the primary sources, concentrating mostly on Kant's Critique of Pure Reason and }}$ 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
$\mathrm{A}_{\mathrm{n}}$ 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. Stress will be put 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 20 th 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 will consist of a reading and discussion of some of the major works of Heidegger.
Attention will be given to his criticism of Western philosophy, his understanding of truth, his teach-
ing 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
An intensive reading course focusing on Wittgenstein's early Tractatus Logico-Philosophate years
his and
philote Philosophical Investigations. Topics of special interest will include the author's views on
will also try the constitution of finguistic meaning, truth, and the problem of solipsism. The course
Onite unit.

Philosophy 495 - Special Topics and Tutorials
Fall, spring
Independent study and tutorial work on various topics of special interest to individual students and faculty directors. 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 philos* ophy, 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/themes which the thesis will address, and present an initial plan of research. Ideally, the prospectus would provide at least a rough ourline for the project as a whole. It should include a tentative 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 poten' tial 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 shall be given 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.

## Physics

Ram Sarup Rana, Ph.D., Professor
Randy R. Ross, Ph.D., Professor
Robert H. Garvey, Ph.D., Associate Professor
Janine Shertzer, Ph.D., Associate Professor and Chair
De-Ping Yang, Ph.D., Associate Professor
Matthew Koss, Ph.D., Assistant Professor
Timothy Roach, Ph.D., Assistant Professor
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 select ed advanced courses, a student is well prepared for graduate study in physics, applied physics, geology, oceanography, 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 Department offers the traditional General Physics lecture courses (Physics 111,112 ) with the required laboratories (Physics 113,114). In addition, the Department offers General Physics in Daily Life (Physics 115,116), which has interactive experiments fully integrated into the lecture course; this course meets four times per week. 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, students in the premedical pro gram, and ROTC students.

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 equivalent). The required physics lecture courses are General Physics 1, 2 (Physics 111, 112) with the laboratory (Physics 113, 114) or General Physics in Daily Life 1, 2 (Physics 115, 116), Methods of Physics (Physics 221),

Modern Physics (Physics 223), Classical Mechanics 1 (Physics 342), Thermal Physics (Physics 344),
Electromagnetic Theory 1 (Physics 351), and Quantum Mechanics 1 (Physics 353). In consultation with their advisors, physics majors must choose at least two additional lecture courses and two advanced laboratories above the 200 level. A laboratory course is taken as a fifth course in any given semester.

Advanced electives offered by the Department include Optics (Physics 231) and Optics Lab (Physics 233), Electronics (Physics 234) and Electronics Lab (Physics 236), Classical Mechanics 2 (Physics 343), Statistical Mechanics (Physics 346), Electromagnetic Theory 2 (Physics 352), Quantum Mechanics 2 (Physics 354), Introduction to Astrophysics (Physics 355), and Life 1,2 are prerequisites for all physics courses above the 200 level; Multivariable Calculus (Marh 241) and Methods of Physics (Physics 221) are prerequisites for all physics courses above the 300
level.

A minor in physics is also offered for interested students. Physics minors must take two semesters of calculus (Math 131, 132 or equivalent). The required physics courses are General Physics 1, 2 (Physics 111, 112) with lab (Physics 113, 114) or General Physics in Daily Life 1, 2 (Physics 115, 116), Modern Physics (Physics 223), and three additional physics courses chosen in consultation with their physics advisors. Two of these three additional courses must be lecture courses above the

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.

The Department offers a variety of courses for non-science majors, including Topics in Physics (Physics 100), Introduction to Astronomy (Physics 101), Introduction to Meteorology (Physics 102), Introduction to Geology (Physics 103), and Energy and the Environment (Physics 104).

## Courses

Physics 100 - Topics in Physics
Alternate years
Recent offerings: The Making of the Atomic Bomb; the World of Electricity; the Way Things Work;
Physics of Human Motion, Dance, and Sports; Light, Color, and Vision; and the Physics of Music.
$\mathrm{N}_{\text {On-science majors only. One unit. }}$
Physics 101 - Introduction to Astronomy
Annually
Motions of celestial bodies; the sun, Earth and moon; other terrestrial planets; Jovian planets; aster-
oids 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
Annually
Atmospheric properties; solar and terrestrial radiation; cloud types and their formation; thunder-
storms, mid-latitude cyclones, anticyclones (low and high pressure systems) and tropical cyclones;
nomena. Non-science majors only. One unit.
Physics 103 - Introduction to Geology
Annually
Geological processes that influence the surface and internal structures of the Earth; the nature of
the Earth as an evolving planet; implications of historical geology; the theory of plate tectonics
(continental drift). Non-science majors only. One unit.
$\mathrm{Ph}_{\mathrm{Ff}} \mathrm{ysics} 104$ - Energy and the Environment
Alternate years
Effects of the production and consumption of energy and natural resources on the environment;
principles of ecology; the role of energy and resources in human affairs; the impact of human activ-
ities on health and the environment and possible solutions to the resulting problems. Non-science
majors only. One unit.
Physics 111 — General Physics 1
Fall
and matics in one and two dimensions; vectors; Newton's laws; work and energy; linear momentum
and collisions; rotational motion; static equilibrium; oscillatory motion; gravitation; fluid mechan-
$i_{c s}$. Calculus-based. One unit.

## Physics 112 - General Physics 2

Wave motion; interference and standing waves; electric fields; electric potential; capacitance; $D C$ circuits; magnetic fields; Faraday's law and inductance; introduction to AC circuits; geomeric optics; wave optics. Calculus-based. One unit.
Physics 113 - General Physics Laboratory 1*
Taken concurrently with Physics 111. One-quarter unit.

## Physics 114 - General Physics Laboratory 2*

Taken concurrently with Physics 112. One-quarter unit.

## Physics 115 - General Physics in Daily Life 1

Kinematics in one and two dimensions; vectors; Newton's laws; work and energy; fluid mechanics electric fields and potential; capacitance; DC circuits; magnetic fields; Faraday's law and inductance. Calculus-based. One and one-quarter unit.
Physics 116 - General Physics in Daily Life 2
Spring
Linear momentum and collisions; rotational motion; thermal physics; wave motion; interference and standing waves; optics; atomic physics; nuclear physics. Calculus-based. One and one-quarter unit.

## 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; Fourief series; and complex variables. One unit.

## Physics 223 - Modern Physics

Special relativity; the particle aspects of electromagnetic radiation; the wave aspects of material par ticles; atomic structure; nuclear structure and reactions; elementary particles. One unit.

## Physics 225 - Modern Physics Laboratory*

Millikan oil-drop experiment; gamma-ray spectroscopy and absorption; the Franck-Hertz experit ment; measurements of e/m for the electron, Planck's constant, the hydrogen Balmer lines, and the speed of light. Taken concurrently with Physics 223 . One unit.

## Physics 231 - Optics

Fermat's Principle; laws of reflection and refraction; image-forming properties of mirrors and lensesi analysis of optical systems; interference; diffraction; thin films; polarization; scattering of light; op ${ }^{\text {tit }}$ cal spectra; lasers and holography. One unit.
Physics 233 - Optics Laboratory*
Image formation by lens systems; spherical and chromatic aberrations; determination of refractive index, optical activity, magneto-and electro-optical properties of materials using the interferometefi spectrometer and polarimeter; lasers, holography and optical fibers. Taken concurrently with Physics 231. One unit.

## Physics 234 - Electronics <br> Sping

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 oscillar tors; principles of feedback systems; operational amplifier circuits. One unit.
Physics 236 - Electronics Laboratory*
AC and DC circuits; low- and high-pass filters; diode characteristics; rectifiers; transistor character istics; multiple stage amplifiers with feedback; oscillators; operational amplifiers; TTL integrated circuits. Taken concurrently with Physics 234. One unit.
Physics 342 - Classical Mechanics 1 Sping
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 ${ }^{2}$ central force; motion of a system of particles, including the two-body problem and coupled har monic oscillators. One unit.

Physics 343 - Classical Mechanics 2
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 346 - Statistical Mechanics
Spring
Kinetic theory and transport phenomena; fluctuations in equilibrium systems; Maxwell-Boltzmann,
Bose-Einstein, and Fermi-Dirac statistics; applications to ideal gases, degenerate gases, solids, and blackbody radiation. Prerequisite: Physics 344 . One unit.
Physics 351 - Electromagnetic Theory 1
Fall
The electrostatic field and potential; divergence and curl of E-field; work and energy in electrostat-
ics; 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.
Physics 352 - Electromagnetic Theory 2
Spring
Maxwell's equations in vacuum and in matter; potential formulation of electrodynamics; energy and
momentum in electrodynamics; wave equation; EM waves in non-conducting and conducting
media; dipole radiation and radiation from a point charge; special theory of relativity and four-
dimensional vectors. Prerequisite: Physics 351 . One unit.
Physics 353 - Quantum Mechanics 1
Fall
The formalism of quantum mechanics; solutions of the one-dimensional Schrödinger equation
including the infinite square well, the harmonic oscillator, and the finite well/barrier; solutions of
$P_{\text {rerequisite: Physics } 223 \text {. One unit. }}$
Physics 354 - Quantum Mechanics 2
Spring
lime-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
Annually
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
ne unit.

- Physics 356 - Experimental Solid State Physics

Spring
Crystal structure; free-electron energy bands; semiconductors and metals; superconductivity; mag-
netic materials. Experiments include X-ray diffraction, optical spectroscopy, Mössbauer ${ }^{\text {spectrometry, and resonance methods. Prerequisite: Physics } 353 \text {. One unit. }}$
${ }^{\text {Physics }} 461,462$ - Independent Study
Annually
One unit each semester.
Physics 471, 472 - Undergraduate Research

* ${ }^{*}$ Pervised research in theory or experiment. One unit each semester.
${ }^{*} \mathrm{E}_{\mathrm{ach}}$ 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 

David L. Schaefer, Ph.D., Professor

Hussein M. Adam, Ph.D., Associate Professor
Donald R. Brand, Ph.D., Associate Professor
Judith A. Chubb, Ph.D., Associate Professor
Caren G. Dubnoff, Ph.D., Associate Professor and Chair
Stephen A. Kocs, Ph.D., Associate Professor
Carol B. Conaway, Ph.D., Assistant Professor
Vickie Langohr, Ph.D., Assistant Professor
Maria G. M. Rodrigues, Ph.D., Assistant Professor
Denise Schaeffer, Ph.D., Assistant Professor
Ward J. Thomas, Ph.D., Assistant Professor
Loren R. Cass, Cand. Ph.D., Instructor
Kenneth M. DeLuca, Cand. Ph.D., Visiting Instructor
James G. Toole, Ph.D., Visiting Instructor
Peter N. Ubertaccio, Cand. Ph.D., Visiting Instructor
George M. Lane, M.A., Lecturer, Ambassador-in-Residence
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 subfields. We strongly encourage students to complete all four introductory cours' es 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 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 out ${ }^{+}$ standing 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 polit' ical 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 ${ }^{2}$ 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.

## Courses

## Introductory Courses

Political Science 100 - Principles of American Government Fall, spring This course provides an introductory overview of American government through study of the prin' cipal 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 pres' ent, 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
${ }^{\text {A comparative analysis of political processes and institutions in Western liberal democracies, }}$
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
This course 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 postcolonialism, 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
This course
2) This course 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 val-
ues and attitudes of their particular region? By the way in which they were selected? American
$\mathrm{G}_{0 \text { vernment. Prerequisite: Political Science } 100 \text {. One unit. }}$
Political Science 204 - Political and Social Movements
An examination of the emergence, organizational dynamics, and effectiveness of political and social
such ments. Key questions: Under what conditions do protest and reform movements arise? Are
participements necessary to achieve change in a democratic political system? What dilemmas do
protestants face? What strategies have they employed, and what determines their success? How do
protest and reform groups translate successful mobilization into effective policy? The course will
include case studies of major American social movements from recent decades. American
$\mathrm{G}_{\text {Overnment. Prerequisite: Political Science } 100 \text {. One unit. }}$

## Political Science 205 - Race and Politics

This course addresses the role of race in American political processes and institutions. Drawing hear ily 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 national ism and conservatism. American Government. Prerequisite: Political Science 100. One unit.

## Political Science 206 - Public Policy

How does policy innovation occur in an American political system that seems designed to produce gridlock? This course examines public policymaking in the United States, with emphasis on institutions and actors at the federal level. Case studies are used to illustrate the dynamics of the policy process. Possible areas of focus include health care, taxes, education, and foreign trade. American Government. Prerequisite: Political Science 100. One unit.

## Political Science 207 - American Presidency

This course studies the presidency as an office that shapes its occupants just as profoundly as specif. ic 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
This course 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's 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

This course addresses major themes in the politics and policies of American cities, including the growth and development of cities in history, the evolution of federal urban policy, the incorporation of ethnic and racial groups in urban politics, and the roles of neighborhood organizations and business interests in economic development. The course also examines contemporary challenges facing cities and their governments, such as the rise of the suburbs, recurring fiscal crises, efforts to cope with crime, and growing poverty. American Government. Prerequisite: Political Science 100. One unit.

## Political Science 211 — Political Parties and Interest Groups

This course 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 intelest 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.

Political Science 212 - Public Administration
This course 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 215 - Media and Politics

This course introduces students to the role that communications and the mass media play in American political life. The course is divided into four sections. In the first section, students examine several models and theories about the influence of the communication process. The second

Section examines the news: how it is created, possible biases, and the impact that news coverage may
have on individuals. The third section focuses on media coverage of elections, with special empha-
sis on presidential elections. The final section focuses on media and governing, including similarities and differences between news coverage of domestic and foreign affairs, and the introduction of new media technologies. American Government. Prerequisite: Political Science 100. One unit.
Political Science 225 - Liberalism and Its Critics
In this course students will explore 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 Political Science 101. One unit.

## Political Science 226 - Gender and Political Theory

Studis course 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 rela-
tionship 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 permission of the
instructor. 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 his-
tory; 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. Political Philosophy. Prerequisite:
Political
Exatical Science 230 - Political Thought in Literature
Alternate years
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. One unit.
Political Science 233 - American Political Thought, 1: to $1850 \quad$ Alternate years
This course focuses on some of the most important texts setting forth the principles underlying the
This course 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. Orher 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

 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 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

Anmualy
A two-semester sequence dealing with Soviet/Russian politics and policies from the 1917 Revo ${ }^{\circ}$ lution to the present. The first semester begins by examining the ideological bases of the Bolsherik 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 revolur tionary 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: Political Science 102. One unit each semester.

## Political Science 257 - Politics of Development <br> Alemate years <br> How can the world's less-developed countries best achieve human development and material

 progress? In what ways are these countries affected by their colonial past and their present-day posir tion in the international system? This course examines altemative concepts and theories of development, and assesses the options available at the national and international levels for pro ${ }^{\circ}$ moting development. Comparative Politics. Prerequisite: Political Science 102. One unit.
## Political Science 261 - Contemporary African Politics <br> Spring

An examination of the process of establishing political order and providing for change in contem porary Africa. Topics to be considered 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

This course analyzes African and African-American political and social thought by examining select ed writings. It explores these ideas within their socio-historical context in connection with related movements: Pan-Africanism, the Negritude movement, the African national liberation movement, the American civil rights and Black Power movements. This course will compare and contrast the African and African-American protest/liberation struggles. Political Philosophy. One unit.

## Political Science 265 - State and Nation in Western Europe

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. One unit.

## Political Science 269 - Power and Politics: A View from Below

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 will address 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 to be 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
The purpose of the course is to examine 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 devel-
opment 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.
$\mathrm{P}_{\text {rerequen }}$

Political Science 274 - Nationalism
Spring
This course examines several leading theories of nationalism and cases of nationalist sentiment and movernents 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
Spring
This course is designed to be an introduction to international political economy. The course 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. Throughout the course,
the 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 103. One unit.
Political Science 276 - The United States and the Persian Gulf Altemate years in fall
This course examines relations between the United States and the countries of the Persian Gulf: $\mathrm{I}_{\text {raq, }}$ Iran, Saudi Arabia, Yemen, the United Arab Emirates, and Kuwait. Following a brief intro-
ductory 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 103. One unit.

Political Science 277 — Americans, Israelis, and Arabs: The United States This course examines the and the Eastern Mediterranean Alternate years in fall 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.
foreige foreign policy has affected, and been affected by, political developments in the region including the Arab-Israeli conflict. International Relations. Prerequisite: Political Science 103. One unit.

## Political Science 282 - American Foreign Policy

This course explores major themes in U.S. foreign policy, focusing on the longstanding and ongo ${ }^{\circ}$ ing 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 $\mathrm{fac}^{\prime}$ ing 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
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 285 - Global Environmental Politics

This course analyzes the roles of national governments, international institutions, and non-state actors in managing global and cross-border environmental problems. Principal topics include the process of international environmental negotiation, the nature of existing international environ ${ }^{\prime}$ mental agreements, and the theoretical and practical problems involved in environmental protection and regulation at the international level. International Relations. Prerequisite: Political Science 103 or permission of the instructor. One unit.

## Political Science 286 - Comparative Environmental Policy

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 poli cies. 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 envi' ronmental policies? What impact do these differences have on the ability of states to achieve cooperative solutions to common environmental problems? What influence do international envi' ronmental 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 <br> This course 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, arms control, weapons proliferation, and the dangers posed by ethnic conflict and political disorder in the Third World. Particular attention is given to the domestic dimensions of U.S. secu' rity policy, including the politics of weapons procurement and the implications of the absence of domestic consensus regarding America's principal national interests. International Relations' Prerequisite: Political Science 103. One unit.
## Political Science 300 - Seminar: Law, Politics and Society

## Political Science 303 - Seminar: Religion \& Politics

explore the concept of "fundamentalism." Is "fundamentalism" a distinct type of religious-political action, and if so, what distinguishes it from more common forms of religious organization? Is there a common set of goals which "fundamentalists" support wherever they are active? And what explains the rise of "fundamentalist" groups in the early 1980s in both the United States and the Middle East? Comparative Politics. One unit.
Political Science 310 - Seminar: Women and American Politics
Spring
This course examines the role women have played in the American political system. It begins with
an examination of women's attempts to take their private concerns into the public realm. It then
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 will also examine two new areas in the study of women's politics: the relation-
ship between women and the media, and the role of minority women in American politics. The
$\mathrm{G}_{0}$ course concludes with an examination of the politics of contemporary young women. American
Political Science 314 - Seminar: 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-gover-
nance. 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-edu-
cated 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 tadically 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 prin-
ciple 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
In this course students examine some of the core concepts, questions and tensions that cut across various strands of contemporary feminism. Topics to be explored include: What is feminist political
theory theory trying to explain, and how might we go about it? Why is it that feminist inquiries into polit-
ical mater ical matters so often lead to questions about the foundations of knowledge? What are the political
implication implications of feminist struggles to combine unity and difference? How have questions of race and
class the class transformed feminist theory? This course also applies various feminist perspectives to specific
policy policy debates. Political Philosophy. Prerequisite: Introduction to Women's Studies, or Political Science 226, or permission of the instructor. One unit.
Political Science 320-Seminar on Political Violence Annually
This course 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 to be stud-
ied include: the French Revolution, Russian anarchism in the 19 th century, Third World national
liberation
in in Ration movements (Algeria and South Africa), the Zapatista revolt in Mexico, ethnic conflict
in $R_{\text {wanda }}$ and the former Yugoslavia, left-wing ideological terrorism in Italy, and right-wing mili-
tias in the United States. Topics to be discussed include the causes of and justifications for political
viol violence, the internal dynamics of revolutionary or terrorist movements, explanations for their suc-
cess or faise
Which failure, the psychological/sociological profile of revolutionaries or terrorists, and the ways in
Which states (both democratic and non-democratic) have responded to violent challenges to their
power. Comparative Politics. Permission of the instructor. One unit.
Political Science 327 - The Politics of International Humanitarian Assistance

Political Science 332 - Seminar: Imperialism
This course surveys the phenomenon of imperialism and explores its impact on present-day world politics. It examines the historical roots of European colonial expansion, with special attention to the political, economic, and technological dynamics of 19 th-century imperial conquest. Other top ics covered include the nature of colonial governance, the psychological dimensions of colonia 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

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 right 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 358 - Democratization

This course 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 unsuccesstul 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 wheher political democracy and economic redistribution can be pursued simultaneously, the relative advar! tages 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 451, 452 - Tutorial Seminar <br> Fall, sping

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

Mark Freeman, Ph.D., Professor
Charles M. Locurto, Ph.D., Professor
Daniel Bitran, Ph.D., Associate Professor and Chair
Danuta Bukatko, Ph.D., Associate Professor
Andrew Futterman, Ph.D., Associate Professor
Patricia E. Kramer, Ph.D., Charles A. Dana Faculty Fellow and Associate Professor
Richard Schmidt, Ph.D., Associate Professor
Charles S. Weiss, Ph.D., Associate Professor
Amy R. Wolfson, Ph.D., Associate Professor
Mark Hallahan, Ph.D., Assistant Professor
Suzanne Kirschner, Ed.D., Assistant Professor
Judith M. Mintz, Ph.D., Visiting Assitant Professor
Randolph G. Potts, Ph.D., Assistant Professor
Matthew A. Toth, Ph.D., Lecturer
Psychology is the scientific study of behavior and mental life. The discipline is broad, with several subfields 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 discir pline. The Psychology Department at Holy Cross has a curriculum and faculty that represent thest
various orientations. Students are provided a curriculum structured to ensure a foundation in both the natural science and social science perspectives within psychology.
Majors take a minimum of 11 courses in the Psychology Department and two courses outside the Psychology Department. The first course taken by majors is Introductory Psychology (Psychology 100 or, for students who have taken an introductory psychology course in high school, Psychology 101 ). Introductory Psychology 100 is offered in both the fall and spring semesters; Introductory
$\mathrm{P}_{\text {sych }}$ Psychology 101 is offered in the fall semester. The year after taking Introductory Psychology, 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 Psychology-Psychology 201). In the third or fourth year, majors take History and Systems of Psychology (Psychology 205), a course that explores the historical and philosophical roots of the discipline.
Four courses are taken to explore the natural science and the social science perspectives of the discipline, with two chosen from the natural science perspective (Sensation and Perception, Physiological Psychology, Learning, or Cognition and Memory) and two from the social science perSpective (Developmental Psychology, Personality, Social Psychology, or Abnormal Psychology). two required courses are chosen in accordance with students' own developing interests and curricular needs and may be any of the courses noted above or other electives covering such topics as aging, gender, and the study of the self. Additionally, majors must take one social-science course and one natural-science 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 ${ }^{\text {tii }}$ sychology 470) and research (Research Projects-Psychology 480) under the individual direction of their professors. Our faculty are actively engaged in research on a variety of topics, including the effects of hormones and drugs on behavior, the effects of heredity and environment on intelligence, cognitive development in children, the relation of perception and action, aging, 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 advancedstudy and career options and has led to students being placed in graduate programs in psychology and medicine as well as a wide variety of work places.

## 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 major in either biology or psychology and take courses that fulfill one of the three tracks within the concentration: Behavioral Science, Organismal $N_{\text {euroscience, or Molecular Neuroscience. Students are exposed to original research throughout the }}$ concentration and may elect to spend their fourth year engaged in a thesis project. Admission to the concentration is competitive and is limited to eight students per class year. Interested students should consult with the Concentration Director prior to registering for second-year courses.

[^2]An introduction to the principles of psychology for third- and fourth-year nonmajors only. This course is not open to students who have taken Psychology 100 or Psychology 101. One unit.

## Psychology 200 - Statistics

An introduction to descriptive and inferential statistical methods in analysis and interpretation of psychological data. Required of psychology majors. Prerequisite: Psychology 100 or Psychology 101. One and one-quarter units.

## Psychology 201 - Research Methods in Psychology

Spring
Survey of methods and techniques employed in psychological research. Topics include observation al research, surveys, case studies, experimental designs, and ethical issues in research. Emphasis is placed on critical evaluation of research. Students develop the skills to design an experiment, sta tistically 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 Systems of Psychology <br> Fall, sping

An examination in historical perspective of what are considered to be the major systems (e.g., ps ${ }^{\prime}$ choanalysis, 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 or Psychology 101. One unit.
Psychology 220 - Sensation and Perception Spring The two major contemporary theories of perception are discussed for each of the sensory/perceptu' al 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 system ${ }^{5}$ with the goal of explaining how we are able to perceive the world. Prerequisite: Psychology 100 or Psychology 101. One unit.

## Psychology 221 - Physiological Psychology <br> Fall, spring

The structure and function of the nervous system is studied to provide an appreciation of the bio logical basis of behavior. The first half of the course emphasizes neuroanatomy, basic cell physiology, effects of drugs on behavior, and the autonomic nervous system. Topics covered in the latter portion of the course include physiological influences on: sleep-wake and circadian rhythms, reproductive behavior, eating and drinking, learning, and mental illness. Natural Science. Prerequisite: Psychology 100 or Psychology 101. One unit.

## Psychology 223 - Learning

An intensive evaluation of how behavior is acquired and maintained. This course 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 influ ences and constraints on learning. Prerequisite: Psychology 100 or Psychology 101. One unit.

## Psychology 225 - Developmental Psychology

A survey of theory and research pertaining to both cognitive and social development. Special top' ics include prenatal development, early experience, perception, memory, intelligence, socialization, moral development, sex-role development, and patterns of child-rearing. Prerequisite: Psychology 100 or Psychology 101. One unit.

## Psychology 226 - Personality

Alternate years
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. Prerequisite: Psychology 100 or Psychology 101. One unit.
experimental analysis of topics such as person perception, interpersonal attraction, prosocial behav-
ior, aggression, social exchange, and group behavior. Prerequisite: Psychology 100 or Psychology
101. One unit.

Psychology 229 - Abnormal Psychology
Annually
Examines psychopathology throughout the life span, with discussions of the developmental, biolog.
ical, 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 psychopathology is obtained, and the problems associated with the evaluation and interpre-
tation of this information. Prerequisite: Psychology 100 or Psychology 101 . One unit.
$\mathrm{P}_{\text {sychology }} 231$ - Industrial/Organizational Psychology
Every third year
Surveys the application of psychological knowledge to a variety of industrial situations. Topics include the selection and development of personnel and the effects of organizational forms on individuals and individual productivity. Prerequisite: Psychology 100 or Psychology 101. One unit.
Psychology 233 - Psychopharmacology Alternate years
The effects of drugs on behavior are investigated through three major themes: the understanding of drug action, pharmacotheraputic drugs, and psychotropic drugs of abuse. Prerequisite: Psychology 221. One unit.

Psychology 236 - Cognition and Memory
Annually
its world. Thamines current perspectives on how a physical system can have intelligence and know
will be surld 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. Prerequisite:
$\mathrm{P}_{\text {sychology }} 100$ or Psychology 101. One unit.
Psychology 239 - Psychology and Aging
Alternate years
first overview of behavioral changes in adulthood and unique psychological aspects of later-life. The
biot half of the course describes research methods in lifespan developmental and aging, examines
and ogical processes that are associated with aging, and explores cognitive, emotional, personality
and social changes that characterize successful aging. The second half of the course examines
abnormal aging; in particularacterize successful aging. The second half of the course examines
depression, Alzheimer's Disease, bereavement. This course is required for students enrolled in the
Gerontology Studies Program. Prerequisite: Psychology 100 or Psychology 101. One unit.
Psychology 242 - Clinical Psychology
Alternate years
A general introduction to the origin, development, and techniques of clinical psychology. Survey of
treatment issues, interviewing, importance of assessment and diagnosis. Importance of specific areas,
${ }^{\text {e.g., behavior therapy, to the modern-day approach to clinical psychology is stressed. Prerequisite: }}$
$\mathrm{P}_{\text {sychology } 229 \text {. One unit. }}$
Psychology 244 - Health Psychology
Annually
An introduction to the major concepts in health psychology and the role of psychologists in health
research and health care. This course explores psychosocial influences on illness and health; the psy-
chological sequence of illnesses such as cancer, AIDS, and heart disease; illness prevention and health promotion; pain and pain management; and psychological issues in terminal illness. $\mathrm{P}_{\text {rerequisite: Psychology } 100 \text { or Psychology 101. One unit. }}$
Phychology 253 - Seminar: Biology of Mind
Alternate years
This course introduces students to evolutionary approaches to psychological phenomena. The focus
is on intelligence and problem-solving abilities in different species, with a special emphasis on the
relationship between humans and species whose evolutionary history may parallel human evolution.
The course also introduces students to evolutionary psychology, an emerging discipline which pro-
vides a challenging reinterpretation of traditional psychological subject matter ranging from
$\mathrm{P}_{\mathrm{x}} \mathrm{s}$ ality and mate selection to altruism and psychopathology. Prerequisite: Psychology 100 or $\mathrm{P}_{\text {sychology 101. One unit. }}$

Psychology 255 - Special Topics in Psychology
This is a first-time course offering. From time to time courses on particular topics will be offered One unit.

## Psychology 261 - Culture and Development

This course examines the diversity of ways in which humans grow and change throughout life. The varied socio-cultural environments to which humans adapt are explored, highlighting both the uni versals and the variations that characterize development from birth to old age. Prerequisite: Psychology 100 or Psychology 101. One unit.

Psychology 318 - Advanced Statistics
Several advanced techniques in inferential statistics are covered, including multivariate analysis of variance, multiple regression, factor analysis, and path analysis. Prerequisite: Permission of instruc ${ }^{\prime}$ tor. One unit.

## Psychology 320 - Laboratory in Neuroscience and Behavior

Every third yed The main goal of the course is to expose students to the methodological tools employed in each 0 the major subdisciplines within the Biological Psychology concentration. The course takes an inter disciplinary approach to the study of the nervous system, emphasizing structure, function, and behavior and using state-of-the-art laboratory techniques. Prerequisite: Permission of instructor One unit.

Psychology 321 - Neuroanatomy and Behavior
Alternate years Neuroanatomy and Behavior is open to third- and fourth-year students interested in a compreher sive study of brain and spinal cord anatomy and function. Structure is studied to provide ${ }^{8}$ foundation for understanding clinical applications of nervous system injury and disease. The coufrse begins by studying gross anatomy of the sheep brain. Topics include motor and sensory systems, lim bic system, cranial nerves, cerebral cortex, and blood supply to the brain. Prerequisite: Permission of instructor. One unit.

## Psychology 322 - Hormones and Behavior

Alternate yers This course will investigate topics such as the hormonal control of reproduction, reproductive behavior, and aggression. Prerequisite: Psychology 221 . One unit.

## Psychology 325 - Cognitive Development

Alternate year
This course focuses on the various facets of children's thinking, from perceptual processes to com ${ }^{m}$ plex problem-solving 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. Prerequisite: Psychology 225 or Psychology 236. One unit.

## Psychology 336 - Cognitive Neuroscience

Alternate yedrs
This course surveys neurocognitive disorders with the intent of understanding the responsible underlying neural mechanisms. Two kinds of disorders are investigated, acquired (e.g., phantom limbs, spatial neglect, visual agnosia, alexia, and amnesia) and developmental (e.g., attention deficits and dyslexia). These disorders are addressed from the personal/clinical, physiological, and functional/cognitive perspectives. Prerequisite: Psychology 236 and permission of instructor. One unit.

Psychology 341 - Seminar: Race, Class, and Ethnic Issues
Alternate yedry
This seminar explores the influences of ethnicity, "race," and social class on human experience, and how these isssues have been addressed in the field of psychology. Topics include social and pss" chotherapy, models of ethinic and racial identity, and self reflection on our own ethnic/racial and class backgrounds in order to understand issues of culture, privilege, and racism. Prerequisite Permission of instructor. One unit.

## Psychology 342 - Seminar: Gender-Role Development

This seminar provides an examination of the role that gender plays in psychological developmen ${ }^{n}$.
Topics covered include depression and self-esteem, aggression, emotion control and emotion expres'
sion, 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. 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 diagnos-
ing mental illness. The centerpiece of this course is an in-depth analysis of a series of clinical cases.
By analyzing these cases in great detail, students develop a thorough understanding of reliable and
valid diagnostic criteria and interviewing procedures. Prerequisite: Permission of instructor. One unit.

Psychology 344 - Seminar: Theories of the Person
Alternate years
This seminar explores classic and contemporary approaches to understanding personality. Issues are
addressed through reading and discussions of works by psychoanalytic, humanistic, cognitive,
behaviorist, and social constructivist theorists. Prerequisite: Permission of instructor. One unit.
$\mathrm{P}_{\text {sychology }} 345$ - Seminar: Face Perception
Altermate years
This seminar will investigate the vast amount of information available from faces, such as age, gen
der, emotions, traits, and aesthetics. Discussion will focus on how we encode and remember faces and how we use information from faces in social interactions. Prerequisite: Permission of instructor. One unit.
Psychology 346 - Seminar: Psychology of Women's Health and Mental Health Alternate years
Examines the historical, political, cultural, and psychological issues of gender and health, specifi-
cally women's health. Over the course of the semester, both theory and health care practice are
discussed as well as a focus on particular problems that face women, such as breast cancer, AIDS,
depression, eating disorders, and violence, etc. Discussions focus on both women as providers and as
users of the health and mental health care systems. Prerequisite: Permission of instructor;
$\mathrm{P}_{\text {sychology }} 229$ recommended. One unit.
$\mathrm{P}_{\text {sychology }} 348$ - Seminar: Science and Politics of IQ
Alternate years
This seminar focuses on the biological and environmental bases of individual and group differences in IQ test scores. Prerequisite: Permission of instructor. One unit.
Psychology 350 - Seminar: Sleep and Behavior
Annually
This seminar focuses on the complex relation between sleep and behavior across the lifespan. Topics
include: sleep architecture, "normal sleep," sleep deprivation, and sleep disorders. Prerequisite: Permission of instructor; Psychology 221 recommended. One unit.
Psychology 355 - Seminar Special Topics
Annually
his is 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. Prerequisite: Permission of instructor. One unit.
$P_{\text {sychology }} 470$ - Directed Readings
A reading program conducted under the supervision of a faculty member, generally focusing on an
are area of psychology not covered in-depth in course offerings. Prerequisite: Permission of instructor. ne unit.

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# Religious Studies 

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Todd T. Lewis, Ph.D., Associate Professor
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Dianne M. Stewart, Ph.D., Assistant Professor
Jennifer Wright Knust, Cand. Ph.D., Instructor
Gary P. DeAngelis, Ph.D., Lecturer
James P. Bailey, Ph.D., Visiting Assistant Professor
The Department of Religious Studies has a two-fold function-that of serving the general student body in a liberal arts college and that of 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 also that students are in the process of coming to terms with their own traditions and personal identities, the department has designed courses for the student body at large that will enable them to achieve both these purposes. Since Holy Cross is a Jesuit college and the majority of its students come from the Roman Catholic tradition, the department believes it is necessary to provide them with an opportunity to know and understand this tradition as well as to situate it in the larger context of other religious traditions and in the broader cultural context in which they live. Students from any tradition must come to terms with the fact of pluralism both relir gious and cultural. Departmental courses are designed to help them achieve these goals.

Because the field of religious studies is multidimensional, a program for the majors must acquaint them with each of these dimensions-world religions, bible, theology, ethics-as well as enable them to pursue in-depth the particular area of their own interest. A major is required to take 10 courses in the department, including one course in each of the following areas: World Religionsi The Bible-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 gradu ate studies, the department strongly advises competence in the classical and modern languages, ${ }^{\text {as }}$ well as the social sciences and philosophy, and encourages them to pursue a research project in their 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 Study of Religion

Religious Studies 120 - Comparative Religions/World View
A systematic exploration of similarities and differences within and among several traditions (Hinduism, Christianity, and Islam) and an examination of several key issues which emerge from the encounter of Christianity with other world religions. One unit.
Religious Studies 147 - Introduction to Judaism
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 formula-
tion 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 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 162 - World Religions (Hinduism, Buddhism and Islam)
$A_{n}$ introduction to the Islamic, Hindu, and Buddhist religious traditions through an analysis of those historical events, beliefs, values, and practices which exemplify their distinctive world views. The course will survey textual, historical and anthropological sources. 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, scientific 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 sacrifi-
cial polytheism, Upanishadic monism, Yoga, sectarian devotionalism, Hindu-Muslim syncretism,
Modern reformers. The course utilizes textual, historical, and anthropological sources. One unit.
Religious Studies 206 - Buddhism
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, medita-
tion 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
Religious Studies 207 - Islam
This course examines 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 will also explore 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 222 - Millennialism in Cross-cultural Perspective
Fall
An examination of millennial, apocalyptic, and 'end-time' beliefs in a variety of cultures around the
World. Topics will include: roots of millennial ideas, beginnings of Islam and Christianity, and modern movements from the Pacific Islands, Asia, Africa, and North America. The course will examine
theories about the universality of millennial and messianic ideas through detailed considerations of specific case studies. Previous course work in religious studies, history, or anthropology will be help ful but is not required. One unit.

## Religious Studies 260 - Comparative Mysticism

 A phenomenological analysis of mystical experience, both theory and practice, and an investigation of the epistemological and ontological status of this experience. The approach will be pluralistic considering mysticism from the following perspectives: psychological, religious, anthropological, philosophical and scientific. The course will examine various conceptions of ultimate reality and ${ }^{\text {a }}$ variety of practices constituting the mystic path or way. Mystical experience will be broadly con' ceived 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
Fall, spring
A comparative examination of Catholicism in four broad culture areas: the United States, Europer Africa and Asia. The specific topics addressed by the course include: inculturation, interreligiols conflict, popular devotion and the cult of Mary, sanctity, Catholic charismatic and healing mover ments, as well as Catholic social and political resistance. Special attention will be given to whether we can understand world Catholicism as a unified system of religious beliefs and practices. One unit.

## Advanced Courses

Religious Studies 305 - Mahayana Buddhism Alternate years A seminar examining prominent movements within the Northern School of Buddhism, with par' ticular 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 devo tional practices. One unit.

## Religious Studies 311 - Zen Buddhism

 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 trap $^{2}$ dition has inspired in China and Japan. One unit.
## Religious Studies 312 - Theravada Buddhism

Alternate years
A seminar examining the prominent texts, doctrines and practices of the Theravada Buddhist $t^{2 / 2 x}$ dition. The course surveys the historical development of the tradition in India, with attention ${ }^{\text {to }}$ major schools of interpretation and practice. Theravada social philosophy and ethics are studied, $\mathfrak{w}$ 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 mod ern movements. One unit.

## Religious Studies 315 - Women in the Muslim World

Every third yer Studies the experiences and roles of Muslim women, drawing on case studies from Africa to Asid. By examining the relationship between women, religion and social change, it will reveal the com ${ }^{\mathrm{m}^{\prime}}$ plex interplay of religion and social change, a relationship that reveals the extent to which religion has been both an instrument of liberation as well as social oppression. Interdisciplinary in approach ${ }^{\text {h }}$ the course cuts across the fields of religion (history of religion), history, and social sciences, focusing on the ways in which women have been able to effect social change within their societies as wella on how they have been affected by their respective religion-social contexts. One unit.

## Religious Studies 327 - The Holocaust: Confronting Evil Alternate years

 An attempt to interpret an event that defies representation and lacks discernible logic or meaninb: 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 thil event, of its significance for modern society, and of its potential for helping us to recognize our ow responsibilities in a world in which ultimate evil is possible. One unit.
## Bible

## Introductory Courses

Religious Studies 118 - Introduction to the New Testament
Annually
$A_{n}$ introduction to early Christian literature and thought in the context of the emerging church. Particular attention paid to Jewish and Hellenistic influence upon the early Christian understanding and response to Jesus in the Gospels and Pauline epistles. One unit.
Religious Studies 122 - Jesus and His Contemporaries
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
A study of the major themes of the Hebrew Scriptures: creation, fall, exodus, covenant, promised
land, the Davidic kingship, prophecy, wisdom, and apocalyptic. Reconstruction of the historical
background of the themes with reference to ancient Near Eastern sources, as well as literary and the-
ological analysis. One unit.

## Intermediate Courses

Religious Studies 212 - The Gospels
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 char-
acter 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 Says of the Desert Mothers. One unit.
Religious Studies 229 - Paul the Apostle
Alternate years
A study of Pauline Christianity, its place in the early church using the letters of Paul, the Deuteropauline letters and the portrait of Paul in Acts. Attention paid to the structure and development of Paul's thought, its Jewish and Hellenistic backgrounds. One unit.
Religious Studies 232 - Women and the Bible Every third year
This seminar has been developed for students who wish to learn more about the feminist interpretation of Scripture. It studies the emergence of patriarchy and its affects on Ancient Near Eastern
society, as well as the influence of patriarchy on the biblical texts. Particular attention is paid to
character portrayal within the patriarchal family structure, as well as to the characteristics of those
fermales who emerge as exceptions to patriarchy. Further, the similarities and differences between the
portrayal of women in the Old Testament and their depiction in the New Testament literature are
examined. One unit.
Religious Studies 252 - New Testament Greek
Annually
Readings from the original Greek text of various New Testament books. Emphasis is on translation,
paying attention to differences between authors as well as differences from Attic Greek. Historical situation and theology will be discussed in the course of translation. Cross-registered with Greek
154. 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 ${ }^{\text {an }}$ option and defend it. One unit.

## Theology

## Introductory Courses

## Religious Studies 115 - The Church in the World

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: the changing nature of the Church's attitude toward other world religions; ecclesiastical authority and infallibilir ty; 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

Spring Introduces students to the major teachings of Roman Catholic Christianity. Topics include: author' ity, word and sacrament, community, truth claims, structures, and the church as an actor in the world today. Specific attention is given to such questions as: What do Roman Catholics believe? Can and do the teachings of the church change? May one dissent from these teachings and still be a member of the Roman Catholic Church? How does Roman Catholicism differ from other form of Christianity? One unit.

> Religious Studies 117 - History of Christianity 1
> 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 will be 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 exarp ination 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

This course provides a survey of the development of Christianity, both its theology and its struc' tures, from the Reformation period to today. Special attention will be paid to the development of the various Protestant traditions, and their doctrine and worship. The interplay between Rom ${ }^{2 a}$ Catholicism and the Protestant churches will be discussed. The impact of these Christian tradition on American society will also be addressed. One unit.

## Religious Studies 133 - Contemporary Christian Spirituality

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, Martip Luther King, Jr., and Gustavo Gutierrez. The course focuses on the quest for justice as an imperar tive of faith. One unit.

## Religious Studies 138 - 20th-Century Protestant Thought

A survey and assessment of the interaction of Protestant thought with the mood and outlook of the modern world. Students will achieve a basic understanding of the discipline of theology as it ${ }^{24}$ been related to social and political issues in Europe, the United States, Latin America, Africa and Asia. Exposure to the movements and paradigm shifts associated with major thinkers in theolog' One unit.

Religious Studies 139 - Understanding Jesus
Annually
An examination to the figure of Jesus as presented in the gospels with attention devoted to histor-
ical 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.
Religious Studies 188 - Catholicism in the United States
Annually
A historical examination of the development of the Catholic Church and its people in the U.S.
19th particular attention will be devoted to issues of church and society as they have developed since the
19th century. Cross-registered in the Department of History as History 187. One unit.

## Intermediate Courses

Religious Studies 200 - Reformation
Alternate years in Spring
Cat most significant political, intellectual, and religious developments of the Protestant and Catholic Reformation movements in 16th- and 17th-century Europe. Cross-registered in the Department of History as History 248. One unit.
Religious Studies 205 - American Religious History
Fall
A study of the American religious experience from colonial times to the present with an emphasis
on the major religions, persons, institutions, and movements. Cross-registered in the Department of History as History 216. One unit.
Religious Studies 207 - God and Human Experience Fall
ordinaurse 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
of ical writings and narratives of faith in which men and women describe the religious dimension of their lives. One unit.
Religious Studies 217 — Eucharist: History and Theology
Fall
This seminar 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
Christian sacraments. It begins with discussion of therical development and theological significance of
the experience of the sacred; sign with discussion of key underlying concepts in sacramental theology:
is paid to the Roman Catholic sign, symbol, ritual; and Christ/Church as sacrament. Special attention Relig $\quad$ Roman Catholic experience, but other Christian traditions are discussed. One unit.

## Religious Studies 261 - Feminist Perspectives in Theology

Altermate years
This course introduces students to the critiques and alternative reconstructions that feminist/wom anist/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 275 - Theology of Liberation Annually

Based on the principle of God's identification with history's outcasts, liberation theology explores the problems of biblical interpretation, Church teaching and Christian commitment in the contempo ${ }^{\circ}$ rary world. With special reference to Latin America, the course examines the relationship between the socio-political consciousness of marginalized peoples and their Christian faith. One unit.

## Religious Studies 285 - Introduction to Jesuit Spirituality

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
This seminar provides an in-depth study of the origins and development of medieval Christianity years in
Altater 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, spirip tuality, 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
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 357 - Modern Catholic Theology
This course examines selected ethical, biblical, historical, and theological questions addressed by modern Catholic theologians such as Rahner, Schillebeecks, Dulles, Tracy, Gutierrez, and Ruether Several major works are read and discussed in detail. One unit.

## Religious Studies 371 - Contemporary Christology

A comparative analysis of the christological writings of major contemporary Catholic 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
Spring
Building on the work of contemporary Latin American liberation theologians, this course 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 U.S. 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 151 — Faith/World Poverty Fall
This course investigates the historical and structural foundations of escalating world poverty. It explores the dynamics of late 20th-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 Two-Thirds 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 Fall
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.
Religious Studies 241 — Social Ethics An introduction to Christian ethical evaluation of such issues as social justice, poverty and eco-nomic justice, racism, and First World/Two-Thirds World relations in the search for peace. One unit.
Religious Studies 294 - Sexual Justice: A Social Ethic of Sexuality ..... FallThis course 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, thecourse focuses on the ways sexual love and happiness are connected to larger issues of cultural, polit-ical and economic well-being. One unit.

## Advanced Courses

Religious Studies 311 - Tutorial

# 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 and Chair
Victoria L. Swigert, Ph.D., Professor and Assistant Dean
Edward H. Thompson Jr., Ph.D., Professor
Carolyn Howe, Ph.D., Associate Professor
Jerry Lembcke; Ph.D., Associate Professor
Daniel Goldstein, Ph.D., Assistant Professor
Anne Marie Leshkowich, Ph.D., Assistant Professor
John A. Schmalzbauer, Ph.D., Edward Bennett Williams Fellow, Assistant Professor
Mary P. Erdmans, Ph.D., Visiting Associate Professor
Susan M. Cunningham, Ph.D., Lecturer
Thomas M. Landy, Cand. 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 combined sociolo-gy-anthropology track major, and a minor in anthropology.

The sociology major is designed to provide a critical assessment of the modern world and a 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 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-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. Three of these six electives may be anthropology courses.

The sociology-anthropology track major (SCAN) provides students with the opportunity to focus a significant part of their major on cultures in the non-Western world, as these regions are studied by cultural anthropologists. Anthropology can lead to further study or careers in the fields of law, development work, international business or journalism, and medicine, or to graduate studies in anthropology and the opportunity for research in such regions as Latin America or Southeast Asia.

This sociology-anthropology track requires 10 courses, divided between the two disciplines. The six courses in anthropology consist of the introductory course, The Anthropological Perspective (Anthropology 101); one course in a world area, e.g., South America (Anthropology 280) or Southeast Asia (Anthropology 275); Ethnographic Field Methods (Anthropology 210 or a specialized seminar in fieldwork); Anthropological Theory (Anthropology 215 or a seminar on theory); one advanced 300-level seminar or tutorial in anthropology; and one additional anthropology elective. The four courses in sociology include: The Sociological Perspective (Sociology 101); either Methods of Social Research (Sociology 223) or The Development of Social Theory (Sociology 241); and two additional sociology electives. All electives will be chosen in accordance with student interest and in consultation with a faculty advisor.

The minor in anthropology is available to students in any major except Sociology (Sociology majors interested in pursuing course work in Anthropology in an intense way should enroll in the sociology-anthropology track in the department). The Anthropology minor provides students with the opportunity to explore non-Western cultures from a cultural anthropological perspective. The
minor consists of six courses: The Anthropological Perspective (Anthropology 101); an ethnographic methods course, (either Ethnographic Field Methods [Anthropology 210] or a specialized seminar in the ethnographic approach); an anthropology course on a world area, such as Cultures of Southeast Asia (Anthropology 275) or Cultures in South America (Anthropology 280); and three 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 the sociology or SCAN major.

## Sociology <br> Introductory Course

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.

## 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
Annually
Examination of major patterns of international and domestic inequality. Topics include measurement of inequality, theories of development and underdevelopment and social stratification, an examination of ideologies of equality and inequality, and consideration of approaches to how existing patterns of inequality might be altered. Prerequisite: Sociology 101. One unit.
Sociology 210 - Social Change in Latin America
Alternate years
Introduces a sociological perspective on social change in Latin America including an examination of the relationship between the United States and Latin America; a critical analysis of different explanations of underdevelopment; and an examination of policy alternatives, development strategies, and grassroots struggles for social change. Several case studies are explored. Prerequisite: Sociology 101. One unit.

## Sociology 217 - Criminology

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 219 - Deviant Behavior

Annually
An examination of deviance as a universal consequence of social organization. The course draws from the major theories of social deviance: functionalism, political-economic theory, the interactionist perspective, anomie theory, learning theory, and social control theory toward an integrated theory of deviance causation. Prerequisite: Sociology 101. One unit.
Sociology 223 - Methods of Social Research
Annually
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 228 - Survey Workshop 1
Alternate years
The course is designed to improve the ability of students to think sociologically. It introduces students to the social survey, a major research tool used by social scientists, and it teaches students elementary data analysis. Prerequisite: Sociology 101. One unit.

## Sociology 230 - Social Problems and Social Policy

Alternate years
This course examines the cultural, social, and political dimensions of social problems. Attention is paid to both the causes of and possible solutions to major problems facing contemporary society. Prerequisite: Sociology 101. One unit.

## Sociology 231 - Social Reform <br> Annually

American sociology has a long tradition of engagement with, and concern over, social problems. This course will examine how Americans perceived and responded to the growth of large cities and the influx of immigrant groups from the late 19th century onward, and how American sociology was shaped by this concern. Utilizes the methods of the sociology of knowledge to understand class and ethnic dynamics as they shaped reform movements and the discipline, and influenced how America's poor and its cities came to be examined as "social problems." Prerequisite: Sociology 101. One unit.

## Sociology 241 - Development of Social Theory

Annually
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 245 - Modernity: Culture, Consciousness, and Insitutions

Annually
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 255 - 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.

Sociology 256 - Self and Society
Every third year
The social processes central to the formation of the self. Development of self is traced through childhood, adolescence, young adulthood and middle age. Explicitly examines the individual's experience of everyday life, his/her confrontation with a variety of social institutions, and the continually changing psychological, physiological, and socio-historical contexts. 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 adult society. Readings include ethnographies of childhood, childhood memoirs, and children's fiction. 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 264 - Sociology of Power
Alternate years
Acritical study of the social bases of power and of the existing constraints and limitations upon its exercise. Emphasis is given to major power theories, the forms and processes of power, and the consequences of these different understandings for the exercise and use of power. Consideration is given to the redistribution of power and its responsible use in contemporary sociery. Prerequisite: Sociology 101 . One unit.
Sociology 265 - Sociology of Work and Labor
Alternate years
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 267- The Postindustrial Turn
2000-2001 only
Sociologists have concentrated a great deal of their theory and research efforts around the comparative analysis of societies experiencing historical transition. Most contemporary social analysts agree that the world is experiencing a period of social structure transformation related to the centrality of computer, technology and emerging telecommincation networks. Such changes are having profound effects on economies, social spaces, class relationships, education and culture. A key assumption of the course is that globalization and economic change is registered at the local and regional level. Prerequisite: Sociology 101. One unit.
Sociology 268 - Social Movements
Annually
This course (1) introduces students to some of the major 20th-century social movements that have shaped contemporary U.S. society and (2) helps students understand the forces which affect our ability to effect social change today. Movements examined include the labor movement, the civil rights movement, student movements of the 1960s, the women's movement, and contemporary struggles for social change in the context of a conservative political climate. Prerequisite: Sociology 101 . One unit.
Sociology 271 - The Family
Every third year
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.

## Sociology 285 - Latinos in the United States

 Alternate years 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 290, 291 — 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 at pre-registration at the departmental office or from the online computer course handbook. 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 328 - Survey Workshop 2

Alternate years Open to students who have completed Survey Workshop I (Soc. 228). Intensive seminar focused on survey research design and data analysis. The research in Workshop II is primarily student-directed. Prerequisite: Sociology 101, Survey Workshop I, permission of instructor. 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 255 ; permission of instructor. One unit.

## Sociology 360 - Catholicism, Media, and Popular Culture

Alternate years
This course focuses on the nexus between Catholicism, the media, and popular American culture in three areas: 1) Representations of Catholics in the American entertainment and news media; 2) The influence of American Catholics on Hollywood; 3) The influence of a Catholic sensibility in film making, popular music, and mainstream journalism. Prerequisite: Sociology 101, permission of instructor. One unit.

## Sociology 362 - Aging and Health Care

Alternate years
An advanced seminar critically examining the resources, including health services and family caregivers, within America's health care delivery system which are used by elders and, at times, designed for elders and their needs. Topics include medicine's understandings of geriatric patients, managed health plans, families as unpaid medical workers, and the death industry. Prerequisite: Sociology 101, permission of instructor. One unit.

## Sociology 367 - Computerization and Human Identity

2000-2001 only
A sustained opportunity to investigate a variety of pressing issues related to the computerization of society. Computerization is a complex combination of objective practices accompanied by powerful collective systems of beliefs. Topics include issues and ethical questions of a digital age. Prerequisite: Sociology 101, permission of instructor. One unit.

## Sociology 371 - Family Issues

Alternate years
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 390, 391 - 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 each semester.
Sociology 494, 495 - Directed Research
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
Annually
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 Course

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, political life, transnational processes. One unit.

## Intermediate Courses

Anthropology 210 - Ethnographic Field Methods
Alternate years
An examination of cultural anthropology's main data-gathering strategy: long-term ethnographic fieldwork of small communities, often located in quite foreign, non-Western cultures. Topics include: review of the methodology literature since Malinowski, participant observation, in-depth interviews, designing field studies, oral histories, spanning deep cultural divides via fieldwork. Often involves hands-on fieldwork in Worcester. One unit.
Anthropology 215 - Topics in Anthropological Theory
Alternate years
An in-depth consideration of a select body of anthropological theory, on a topic such as personhood, or language and power issues. Prerequisite: Anthropology 101 recommended. One unit.
Anthropology 255 - Gender in Cross-Cultural Perspective
Alternate years
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 262 - Anthropology of Religion
Every third year A comparative, cultural anthropological examination of systems of religious action and belief, with special stress on non-Western religions. Topics include: symbolic, structuralist, and ecological approaches to ritual and myth; religious changes as village societies convert to world religions, seen in political perspective; shamanism, trancing, and other major religious forms in cultures of Southeast Asia, South America, Native America, Africa, India, and Melanesia. Prerequisite: Anthropology 101 recommended. One unit.

Anthropology 263 - Anthropology of Art A cultural anthropological exploration of non-Western village art traditions: masks, ritual sculpture and architecture, holy textiles, body decorations, sand paintings, and so on. These objects will be studied in relation to indigenous schemes of village thought and as changing ritual systems, which have now been transformed into primitive art and tourist art through interaction with new markets. Prerequisite: Anthropology 101 recommended. One unit.
Anthropology 275 - Cultures of Southeast Asia
Alternate years
A cultural anthropological inquiry into some of the main social systems and idea systems of village cultures and city communities of mainland and island Southeast Asia. Attention also to processes of modernization in the region. Kinship, economic change, ritual, myth, political thought, oratory, gender in comparative, regional context. Prerequisite: Anthropology 101 recommended. One unit.

## Anthropology 276 - Psychological Anthropology

Every third year
This course examines the diverse ways that non-Western societies imagine the human life cycle; the cultural construction of emotion, of mind, and of self; and the comparative definitions of consciousness. This exploration of psychological themes will draw on non-Western ethnographies. Prerequisite: Anthropology 101 recommended. One unit.

## Anthropology 280 - Cultures of South America

Through a study of selected Latin American societies, a consideration of the transformation in rural and urban communites through the process of European contact and colonialism. Current concerns such as the cocaine trade, ethnocide, missionization, and land rights struggles will also be addressed. Prerequisite: Anthropology 101 recommended. One unit.
Anthropology 290 - Special Topics
Annually
These intermediate level anthropology courses address a variety of issues of contemporary ethno ${ }^{-}$ graphic importance. Prerequisite: Anthropology 101 recommended. One unit.

## Advanced Courses

Anthropology 390, 391 - Selected Topics in Anthropological Analysis Annually A critical examination of selected topics utilizing anthropological theory and reseatch methods. Topic and staff rotate. Prerequisite: permission of instructor. One unit each semester.
Anthropology 494, 495 - Directed Research
Annually
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

Spring, Fall
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

Annually
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 and Chair
Steve Vineberg, Ph.D., Professor
Edward Isser, Ph.D., Associate Professor
William J. Rynders, M.F.A., Associate Professor
Daniel McCusker, Lecturer, Dance Instructor
Michael I. Baron, M.F.A., Lecturer
Desak Made Suarti Laksmi, Luce Professor of Balinese Music, Theatre, and Dance
Kathleen Ridlon, M.F.A., Lecturer
The Theatre Department 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. Our dramatic literature and theatre history courses place those texts in historical and thematic contexts and focus on them as a medium for performance. Our dance courses are grounded in an understanding of dance history as well as technique and composition. Our design courses explore visual interpretations of texts in performance. Our directing courses 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, mask, stage management, and playwriting.

The fully-equipped Fenwick Theatre houses the major productions of the department, dance concerts, and other theatrical events. A range of studio productions (directed by both faculty and students), workshops, and classes take 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 Theatre Department 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 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, Techniques of Mask Performance, American Film, Acting for Audience, Film as Narrative, Selected American Stage and Film Artists, Political Theatre, Audition Techniques, Scene Design, Lighting Design, Costume Design, Directing 1, Advanced Directing, Playwriting, Performance Recital, Performance for Audience, Ballet 1, 2, 3, 4, Modern Dance 1, 2, 3, 4, Contemporary Dance Repertory, Improvisation/Composition, and tutorials in production, film, dance, directing, dramatic literature, or design.

The Holy Cross Theatre Department 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, appreciation and practice of the art of acting and theatre. One unit.
Theatre 110 - Theatre Practicum
Fall, spring
Participation in Theatre Department 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. Required with enrollment in Theatre Design and Technical Production, Basic Acting, Scene Study, Voice in Acting, Scene Design and Lighting 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.

This course will examine 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 This course examines years ent political content. The works on the syllabus deal with war, revolution, oppression, gender and cultural issues, the Holocaust, and populism, among other topics. One unit.

Theatre 140 - Holocaust on Stage and Screen
Altermate years
This course 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 to be examined include the relationship between a dramatic text and its his ${ }^{-}$ torical model, the problem of transfiguration, the applicability of a structural model for organizing texts, documentary versus dramatic enactment, varying national perspectives, the emergence of feminist and gay perspectives, and the problem of exploitation and revisionism. One unit.

Theatre 151 - Ballet 1
Alternate years
Beginning ballet technique, for those with little or no experience. Working at the barre will intro ${ }^{-}$ duce basic positions, vocabulary, concepts. Simple across-the-floor combinations. One unit.

## Theatre 160 - American Film

Annually
This introductory course teaches the student how to read a movie. Films are presented by genre, with conventional examples of each genre 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 <br> Annually

This course 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

Altermate years
This course studies modernist movements in western theatre: realism, expressionism, surrealism, epic theatre, symbolism, and theatre of the absurd. Readings and viewings include plays by Ibsen, Strindberg, Shaw, Chekhov, O'Neill, Dürrenmatt, Brecht, Williams, Pirandello, Beckett, and Guare and films by Lang, Pabst, Scorsese, and Cocteau. One unit.

## Theatre 165 - World Film

Alternate years
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
This course 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

Alternate years
This is a basic introductory modern dance technique course. Students will learn beginning modern dance exercises and movement combinations. The basic components of modern dance and its place in 20 th-century art will be examined. No prerequisite. One unit.
Theatre 184 - Body English/Body Training
This is a studio course challenging students to improve their own body use and to examine the basics of physical communication. Issues of gender and physical style will be examined. A brief history of Western social postures will be included. One unit.

Theatre 202 - Voice in Acting
Alternate years
Students learn how to correct regionalisms, support the voice, and increase range and flexibility in songs and dramatic texts. Healthy vocal production, relaxation and power are emphasized. One unit. Theatre 203 - Scene Study

Annually
This is an intensive scene study class. Plays ranging in style from Restoration to contemporary are analyzed and performed. Physical and vocal exercises from Basic Acting will be continued with the addition of period style work. One unit.
Theatre 227 - Scene Design
Spring
Principles of scenic design and script analysis as they are used to create an environment for the action of the play. Includes a historical survey of scenic design, theatre architecture, period style, drafting, and rendering techniques. Work on a set for a Fenwick production provides practical experience. One unit.

## Theatre 228 - Lighting Design

Alternate years in spring A study of the properties of light and the objectives of stage lighting as used for drama and dance. Includes basic electricity and its control, lighting equipment, and drafting. Practical experience is obtained through running and designing a production. One unit.
Theatre 230-Costume Design Every third year
This is 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, 18th- and 19th-century fashion. One unit.
Theatre 240 - Directing 1
This course introduces students to the craft and theory of theatrical production. Students function as autonomous artists-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. One unit.
Theatre 252 - Ballet 2
Annually
Ballet technique class. Traditional class format: barre, center practice, petite allegro, grand allegro. Prerequisite is Ballet 1 or instructor's permission. One unit.
Theatre 257 - Improvisation/Composition
Annually
This is a studio course in movement improvisation and composition. Students will be exposed to various 20th-century techniques for generating physical theatre and dance movement. Numerous short compositions will be prepared as in a visual arts sketch class. No prerequisites. One unit.

## Theatre 262 - Acting in the 20th Century

## Theatre 304 - Audition Techniques

This advanced class focuses on monologues. Students will prepare contrasting audition pieces that will be juried at the end of the semester. One unit.
Theatre 306 - Techniques in Mask Performance
Alternate years
This course develops the student's awareness of the historical and cultural significance of mask drama. Indonesian, South East Asian, and Japanese techniques will be used to teach actors how to connect physically, vocally and emotionally. One unit.
Theatre 340 - Advanced Directing
Alternate years
This course is a practicum to explore 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). One unit.
Theatre 353 - Ballet 3
Annually
Ballet technique class. Traditional format, with special attention to phrasing. Prerequisite is Ballet 2 or instructor's permission. One unit.
Theatre 354 - Ballet 4 Annually Ballet technique class. Traditional format, with special attention to phrasing, petite allegro, and movement through space. Prerequisite is Ballet 3 or instructor's permission. One unit.
Theatre 360 - Shakespeare Through Performance
Functioning as scholarly artists in a laboratory setting, students-working from both the Folio and modern editions-will 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 will be placed upon the desirability and/or need to subvert problematic texts through performance. One unit.
Theatre 361 - Film as Narrative
Every third year
An advanced course dealing 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 383 - Modern Dance 3
Annually
This is a modern dance technique class. Students will be required to prepare two short, fully ${ }^{-}$ rehearsed in-class performances. Prerequisite is Modern Dance 2. One unit.
Theatre 384 - Modern Dance 4
Annually
This is a modern dance technique class. Students will be required to choreograph and perform two short dances. Prerequisite is Modern Dance 3. One unit.
Theatre 400 - Tutorial/Theatre
Fall, spring
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. One unit.
Theatre 405 - Performance Recital
The course is designed for the individual needs of advanced acting students. Rehearsal and performance in a major production is the main basis of grading. One unit.
Theatre 406 - Performance for Audience
Spring
Advanced acting work in a major role. One unit.
Theatre 450 - Dance Performance
Annually
In this course students will rehearse and perform modern dance choreography provided by the instructors and other choreographers. Students interested in preparing for choreography for performance will have a chance to do so. Prerequisite is Modern Dance 2, 3, 4, Ballet 2, 3, 4, or permission from the instructor. One unit.

## Visual Arts

Virginia C. Raguin, Ph.D., Professor
John P. Reboli, S.J., Ph.D., Associate Professor and Chair
Susan P. Schmidt, M.F.A., Associate Professor
Joanna E. Ziegler, Ph.D., Associate Professor
Michael L. Beatty, M.FA., Assistant Professor
Robert H. ParkeHarrison, M.F.A., Assistant Professor
Stephen T. Burt, M.F.A., Visiting Assistant Professor
Alison C. Fleming, Cand. Ph.D., Visiting Instructor
Mary Ann A. Powers, M.A.,A.B.D., Lecturer
Jeff Hilliard, M.F.A., Lecturer
Mary Lang, M.F.A., Lecturer
Leslie 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 which 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. 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 electives in art history, with one in any four of the following areas: Ancient, Medieval, Renaissance, Baroque/18th Century, 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 suided 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 between six areas of the discipline (Ancient, Medieval, Renaissance, Baroque/18th Century, 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. The interested student and the aspiring artist study with practicing professionals to gain insight into the creative process and the complex paths to creating art in a contemporary context.

A wide range of courses are offered encompassing Drawing, Painting, Photography, Printmaking, Sculpture, Digital Imaging. Students also have the option to create tutorials that combine disciplines and investigate new areas. From the introductory to the advanced level classes are "hands on" emphasizing an experimental attitude towards materials, independent thought and the acquisition of technical skills.

An active program of events augments classroom activities and develops student awareness of contemporary arts practice. There are ongoing exhibits of student work in The Ramp and Fenwick Hall Galleries while the student-run arts organization GESSO sponsors numerous shows in the campus center. The Iris and B. Gerald Cantor Art Gallery provides a venue for traveling exhibits, contemporary, modern and historic art.

Studio classes demand commitment on the part of participating students to broaden their vision and draw connections between the classroom and the outside world. The studio arts encourage precise observation and invention, inspire discussion, stimulate flexible, innovative thinking and develop creative problem solving abilities.

The studio art major requires a minimum of 10 , a maximum of 14 , beginning with 2D 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 or Drawing 1 and Drawing 2. 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.

In the fall semester of their fourth year studio majors are required to take the Studio Concentration Seminar which combines a focus on individual studio work with readings and discussions about the process of making art. Students in the seminar are provided with a workspace in Millard Art Center. From this seminar students will be selected for a spring semester exhibition seminar, in preparation for the senior exhibition in the Cantor Art Gallery.

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 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.

## Visual Arts History

## Introductory Courses

Visual Arts History 101 - Introduction to The Visual Arts Fall
This is the fundamental, introductory course in art history and visual culture in the department, which is occasionally team taught. Emphasis is placed 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.

Visual Arts History 102 - Survey of Art: Renaissance to Modern Art
Fall, spring
A cultural history of the major periods of western art since 1400: Renaissance, Baroque, Modern Art. The emphasis is on developments in painting, sculpture and architecture during these periods. Social and historical factors which influenced the art are also given attention. One unit.

Visual Arts History 115 - Introductory Topics in Art History Annually Introductory Topics in Art History are offered by all professors. These courses explore 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.
Visual Arts History 126 - Hands on Contemporary Art
This is an art history course, taught in conjunction with the studio course Visual Arts Studio 126.
The course covers 20th-century art, both in its modern and postmodern phases. Major movements,
styles and artists are covered each week through lectures, videos and slide presentations. Students write weekly papers, and each student is responsible for a final project, drawing on both modern art history and on studio practice. The two courses are taught in the same semester, and all students are tequired to take both courses. One unit.
Visual Arts History 142 - Introduction to Classical Archaeology Fall, spring
Offered by the Classics Department (Classics 160). Cross-registered with Art History. One unit.

## $>$ Criticism and Themes

Visual Arts History 120 - Structures of Faith
Annually
This course qualifies for both arts and religion distribution requirements. Lectures cover the development of religious buildings. A variety of buildings, ornate and plain, Catholic, Protestant, and other faiths are included. Students also receive hands-on experience studying churches in the Worcester area or their home towns. Recommended for students considering careers in preservation or architecture. One unit.

## Visual Arts History 136 - Narrative in Art and Film <br> 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

$V_{\text {isual Arts History } 204 \text { - Medieval Art }}$
Annually
This course 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

This course examines painting, sculpture and architecture of the 14th and 15th 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 206 - Northern Renaissance Art

Every third year The Renaissance in the North extends from the 14th to 16th centuries in Germany, the Lowlands, England and France. The panel paintings of Van Eyck, Van der Weyden, and Hugo van der Goes are studied in detail. The art of printmaking, as exemplified by the works of Dürer, is included. One unit.
Visual Arts History 207 - Baroque and Rococo Art Every third year
This course studies the diverse styles that emerged in European painting, sculpture and architecture in the 17th and early 18 th 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 208 - American Art
Every third year
This course considers American painting, sculpture and architecture from the 17th century to the present. Topics considered may include Colonial portraiture, the rise of landscape painting, revival styles in 19th-century architecture, and trends in modern, post-modern and contemporary art. Emphasis is placed examining works of art in local museums, as well as looking at New England architecture. One unit.

This course 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.
Visual Arts History 212 - High Renaissance Art Annually
This course 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 to be studied include Leonardo da Vinci, Raphael, Michelangelo, Bramante, and Titian. 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.
Visual Arts History 247 - Ancient Sanctuaries and Religion Every third year Offered by the Classics Department (Classics 264). Cross-registered with Art History. One unit.
Visual Arts History 248 - Ancient Coins
Every third year
Offered by the Classics Department (Classics 261). Cross-registered with Art History. One unit.
Visual Arts History 262 - Greek Sculpture Alternate years
Offered by the Classics Department (Classics 262). Cross-registered with Art History. One unit.
Visual Arts History 263 - Roman Sculpture Alternate years
Offered by the Classics Department (Classics 263). Cross-registered with Art History. One unit.
Visual Arts History 265 - Archeology of Egypt
Every third year
Offered by the Classics Department (Classics 265). Cross-registered with Art History. One unir.

## $>$ Criticism and Themes

Visual Arts History 230, 231 - Architectural Studies 1, 2
Annually
These courses examine the history of architecture from pre-history to the present. The 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. There is strong emphasis on critical reading, class discussions and preparation of one major research paper. One unit.
Visual Arts History 234 - The Painter in the Modern World
Spring
The development of painting as the central medium of visual expression in the 19th and 20th cen turies is 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 influence on the cultural and social ideas of Western society. Prerequisite: permission of the instruc' tor. One unit.

Visual Arts History 235 - Sacred Spaces
Every third year
The evolution of sacred architecture (temples, churches, mosques, etc.). Thematic rather than his torical; close attention is given to the imagery and intent of spatial design. Prerequisite: permission of the instructor. One unit.

Visual Arts History 260 - Topics in Art History
Annually
Special topics in art history, architecture and criticism are offered regularly by all professors. The courses respond to special interests evidenced by students, outgrowths of topics addressed in an intermediate course, or research interests of the faculty. The courses are often interdisciplinary in
nature and sometimes are offered without prerequisites. Examples of recent Special Topics are: "Landscape, Form \& Meaning," "Art and Contemplative Practice," "Life and Death in 14thCentury Art." One unit.

## Exhibition Seminar

By arrangement
A seminar leading to an exhibition to be held in the Iris and B. Gerald Cantor Art Gallery.
(Exhibition will not necessarily be held in the same year.) Students will participate in as many phases of the exhibition program as possible from selection of works to preparation of catalogue entries.
Topics will vary from year to year but will ordinarily focus on some aspect of 20 th-century art.
$P_{\text {rerequisite: third- and fourth-year students only and permission of the instructor. One unit. }}^{\text {the }}$

## Advanced Courses

Visual Arts History 301 - Concentration Seminar Fall
This course, designed for majors, provides a critical examination of issues and methods in the liter-
ature 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
> Tutorials relate to all areas covered by Visual Arts History 200 courses. One unit each semestere

## Visual Arts Studio

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 ensure the beginning student of a solid introduction to the creative process. This course, which is taught by the studio staff, is one of the prerequisites for all intermediate courses. One unit.
Visual Arts Studio 102 - 3-D Fundamentals
Fall, spring
An exciting course for students who are interested in an introduction to the physical world of sculp-
tural 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. You will learn to
scan, generate and manipulate images and text using Photoshop 5.0 and QuarkXpress 4.0. You will
be expected to 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 will discuss con-
temporary 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 on a structural understanding of the figure and on expressive approach to drawing. Students work in a range of media including charcoal, oil stick, acrylic paint and wash. In addition to classwork, students work on independent projects in drawing. Personal involvement with your work is essential. One unit.
Visual Arts Studio 115 - 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.
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. You are encouraged to explore new content in your work. Course includes readings, sketchbook work, and a visit to an exhibition. Prerequisite: 2D Fundamentals or Life Drawing. One unit.

Visual Arts Studio 126 - Hands-on Contemporary Art
This studio course is taught in conjunction with art history course Visual Arts History 126. It puts 20 th-century art history and theory into practice and teaches the fundamentals of drawing. Students work from the still life, the model and the imagination to gain insight in the use of materials and the conceptual aspects of studio art. There are weekly projects, and each student is responsible for a final project which combines contemporary art history and studio practice. The material covered will provide a good foundation for further study in the arts. The two courses are taught in the same semester and all students are required to take both courses simultaneously. One unit.

## Intermediate Courses

Visual Arts Studio 200 - Painting 1
Fall, spring
This course opens up to interested students the fascinating historical and contemporary world of artmaking through oil painting. Students explore the phenomena of color, light, and paint application through still life, figure painting and abstraction. Readings, critiques and discussions augment the hands-on experiences to offer the student a breadth of exposure to the fundamentals of painting. Prerequisite: 2D Fundamentals or a Drawing course. One unit.
Visual Arts Studio 201 - Painting 2 Annually Introduces the student to more advanced concepts of painting. The student will investigate painting methods, color, and subject matter while personal direction will be highly encouraged. Readings from periodicals, magazines and writings on art criticism will be encouraged. Visits to museums and galleries are required with the probability of one trip to New York City. Prerequisite: Painting I. One unit.
Visual Arts Studio 204 - Digital Imaging 2
Spring
This class takes an exploratory approach to the next level of understanding digital imaging in the fine arts. You will 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 is placed on combining the aforementioned 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
This course emphasizes printmaking as an expressive medium. Students are encouraged to use var' ious techniques experimentally and in service of their personal imagery. Printmaking 1 concentrates on Intaglio printing from metal plates onto paper. Intaglio processes include etching, aquatint, sugar-lift, soft-ground drypoint, and the electric engraver. Photo etching and beginning color printing will be explored. Prerequisite: Any Drawing course or 2D Fundamentals. One unit.

## Visual Arts Studio 211 - Printmaking 2 <br> Altermate years

This course continues with a focus on advanced intaglio printing. Students also explore monotypes single images made from paintings on Plexiglas. This course stresses developing individual ideas in printmaking and ends with an exchange of editioned prints between members of the class. Prerequisite: Printmaking 1 or permission. One unit.

Visual Arts Studio 212 - Print and Digital Projects
Altermate years
This course will contrast 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 will work in the Millard Media Lab using Photoshop 5 to create, manipulate and print images on the computer. Prerequisite: 2D Fundamentals or other studio art are course. One unit.
Visual Arts Studio 215 - Special Topics in Studio Art
Annually
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.

Visual Arts Studio 220 - Sculpture 1
Fall, spring
Explores the elements of three-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
Spring
This course allows the student to continue in-depth work in selected materials of sculptural expression. Students will design their own assignments and work on them independently. Throughout the Course, students will participate in group critiques to discuss, not only the finished work, but more importantly, the work in progress. Prerequisite: Sculpture I. One unit.
Visual Arts Studio 222 - Drawing 2
Alternate years
This course emphasizes the relationship between representation and abstraction for those who wish to expand seeing, interpreting and inventing images. Emphasis is on the development of personal and creative vision rather than realistic rendering. Artwork, readings, critiques and discussions and an experimental teaching environment offer the student a challenging intermediate course in the visual arts. Prerequisite: Drawing I or Life Drawing. One unit.
Visual Arts Studio 230 - Photography 1
Fall, spring
A course 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 crit-
icism. Prerequisite: One previous course in studio art. 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 areas are required. Continuous work and advancement through creative assignments in photographing, processing, printing and criticism. Prerequisite: Photography I. One unit.

## Advanced Courses

Visual Arts Studio 301 — Studio Concentration Seminar
The Studio Concentration Seminar is an advanced studio course where students create an extensive body of work to be exhibited in a juried group exhibition. Readings and discussions help to enhance the intellectual understanding and exploration of art throughout this course. This class visits New York and Boston galleries to look at current work. This course is required for Studio Art Majors during their senior year and open to Studio Art Minors. Prerequisite: Permission of the instructor. One unit.
Visual Arts Studio 302 — Painting 3
Annually
Emphasizes student responsibility for the selection of subject matter, medium and style. The instructor serves as a supportive resource responsive to the individualized direction selected by the student.
Prerequisite: Painting 2. 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 on the southwest edge of the city on one of Worcester's seven hills-Mount Saint JamesHoly Cross has a terraced, 174-acre campus whose buildings are a picturesque blend of traditional red brick and newer structures. Its grounds personnel have won nine national awards for the maintenance and appearance of the campus, including two Best Maintained Campus in the U.S. awards. Two dozen major buildings dot the campus.

## Libraries

At Holy Cross, libraries are considered central to the educational mission of the College. The libraries place great emphasis on instruction with the goal of helping students become information independent during their four years at Holy Cross. The system includes three libraries: the main library, Dinand; the O'Callahan Science Library; and the Fenwick Music Library. The libraries presently house a combined collection of more than 570,000 volumes and more than 1,750 profes* sional and scholarly journals. Additionally, the library subscribes to over 200 full text electronic journals.
Dinand Library, with a shelving capacity of 500,000 volumes, has seating for more than 800 readers, and serves as the system's 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 5,500 volumes. Dinand's Main Reading/ Reference room contains PCs that access the library's (DRA) online catalog (via the library Web page) and a wide variety of other informational databases, including direct access to the World Wide Web. The library is a subscriber to the OCLC and First Search Services. It also contains major reference works, and facilities for research and reading. On the second floor of Dinand are the reserve area, with its large reading room, the microform area, video viewing facilities, the Inter-Library Loan Department, and the library photocopy center.

The Serials Department offers multiple research indexes (both print and electronic) to journals in art, humanities, social sciences, theology, philosophy, and economics. More than 50 newspapers are received; The New York Times from 1851 to present is on microfilm.

Additionally, online versions of several important indexes as well as the Encyclopedia Britannica are available to users over the campus network. Complete access to Lexus/Nexus provides access to many newspapers and legal documents, and complete access to the Expanded Academic Index. The network extends into every faculty office and all residence hall rooms, thus providing 24 -hours-ar day access to the library's holdings.

The Reference Department provides scheduled, course-specific bibliographic instruction as well as the customary on-demand reference service. A mandatory instructional tour is a central compo ${ }^{-}$ nent of first-year orientation.

The Library's Internet Gateway provides direct access to the catalogs of major university and research libraries around the world as well as access to the vast array of databases now available on the Internet.

The library is a member of a group of 14 area libraries (academic, private, and public) known as the Worcester Area Cooperating Libraries (WACL) under the aegis of Colleges of Worcester Consortium. This organization publishes a Union List of Serials, sponsors library projects and studies, operates a twice-daily shuttle service for inter-library loans among the libraries, and affords its members a collection of more than 3.5 million volumes.

The College's Special Collections are located in Dinand. The Entire Special Collections and Archives area was redesigned in 1999 to provide a state-of-the-art, climate-controlled and highly secure environment for the library's treasurers. The facility's comfortable reading room contains network connections for scholars working on laptops. It contains six incunabula (printed prior to 1500), 15th to 17th-century Jesuitana, Americana (books published in America prior to 1820), John Henry Cardinal Newman letters and first editions, the scrapbooks of James Michael Curley, and the correspondence of Louise Imogene Guiney. Of special interest are the recently acquired
papers of Admiral Husband Kimmel, The U.S. Pacific Fleet Cammander at Pearl Harbor in 1941. The collection also houses the NASA memorbilia (including a specimen from the lunar surface), maps, and photographs of Holy Cross alumnus, Richard Green '49.
The O'Callahan Science Library, located in Swords Hall, contains more than 90,000 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 of proven worth. With all these resources, a full-time, accredited Science Librarian, and more than 500 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 4,100 compact discs, 6,500 books, 6,500 music scores, 600 videos and 7,300 LPs. A gift of more than 8,000 opera recordings provides added richness 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.

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.

## 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 newly renovated 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 College 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, a duplicating center and fax service. Within the Campus Center is a multi-purpose ballroom and private dining rooms catered by the college Dining Services Department. To accommodate the needs of non-resident students there is a day-student lounge.

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

Five residence halls are located on the upper level of the campus, in line with the Hogan Center. Two others, which have been renovated into suite accommodations, are located at opposite ends of the Kimball quadrangle. One residence is adjacent to Dinand Library, and another is near Saint Joseph Memorial Chapel.

## The Chapels

Midway up Mount Saint James is Saint Joseph Memorial Chapel, a pillared structure that is the home of the campus's worship life. Sunday Masses are celebrated in the upper chapel, which has a seating capacity of 900 . The Taylor and Boody tracker organ, designed in the tradition of the 16thCentury Dutch and north German organs, was installed in 1985. A Saturday Vigil Mass and daily
liturgies (including Mass, Taizé Prayer and Prayer of Lament) are celebrated downstairs around the liturgies (including Mass, Taizé Prayer and Prayer of Lament) are celebrated downstairs around the altar in the Mary Chapel. The Sacrament of Reconciliation is available four nights a week downstairs in the Reconciliation Chapel. The plaza outside of the Chapel is highlighted by a memorial plaque to the six Jesuit priests and their two women associates who were killed in 1989 at the Central American University in El Salvador.

## 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.

## Information Technology Services

Information Technology Services (ITS) strives for continuous improvement in providing production and support services for the desktop, information systems, and network services.

A staffed Help Desk provides a first point of contact for users. Support is given for a wide variety of products and services, including Windows, Macintosh, electronic mail, word processing, residence-hall networking, Internet connectivity, and the online campus-wide information system.

The College maintains more than a dozen computing laboratories located throughout the campus. Four are general-access facilities, available to all students, faculty and staff. The O'Kane student computing laboratory is available seven days per week, 24 hours per day, and contains numerous Windows and Macintosh PCs, printers, and stations for browsing the Internet or campus-wide information system. Another lab is the "computer classroom" in Stein that contains 24 Windows PCs. That lab is used extensively as a classroom. The Desktop Services group of ITS provides software assistance to students on the Microsoft Office suite of products, including Microsoft Word for word processing. Training courses are offered throughout the year and individual consultations are provided by Help Desk, student, and professional staff. The Help Desk is located in the basement of Fenwick Hall along with the other ITS offices.

The College offers a comprehensive residence-hall networking program, enabling full graphical Internet browsing, access to the campus-wide information system and e-mail.

Students can also purchase Dell computers and related software at the College Bookstore, in order to best make use of the networked computer services.

For more information, see www.holycross.edu on the World Wide Web.

## Hart Recreation Center

Completed in 1975, this contemporary structure contains a two-level, state-of-the-art fitness center; a 4,000-seat basketball arena and a separate, 1,200 -seat ice hockey rink; an Olympic-size swimming pool; racquetball courts; a crew practice tank; and locker rooms.

## 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

Completed in 1988, this five-story building contains 35 classrooms and two large lecture halls for the departments of economics, modern languages and literatures, and religious studies. Additional facilities include the audio visual department; a computer instruction laboratory; and a state-of-theart Multimedia Resource Center.

## 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.

All candidates must submit official results of SAT I or ACT and three SAT II: Subject Tests directly from the appropriate testing service. The SAT II Writing Subject Test is required of all applicants and, if possible, should be taken no later than December of the senior year of high school. Students wishing to satisfy the College's foreign language requirement or simply continue the study of a foreign language should take the appropriate Subject Test. Other tests may be of the candidate's choosing, preferably in subject areas in which he or she plans to study at Holy Cross. They may be taken at any testing date that is convenient and appropriate for the candidate, but not later than December of the senior year.

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 economics-accounting major, 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 or the Common Application. Candidates may also use College Link or Apply computer software programs to submit an 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

$V$ isitors 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 Thursday 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. We suggest that they be arranged well in advance.

Alumni interviews are available in most metropolitan areas to those students unable to interview on campus. To facilitate scheduling, please check the appropriate box on the application form and submit it no later than December 31. To arrange any of the above, please write or call the Admissions Office (1-800-442-2421).

## 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 $\$ 300$ 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. All required entrance exams must be taken during the junior year, and a personal interview is required.

## Transfer Students

Each semester Holy Cross accepts a limited number of transfer students to the second- and thirdyear 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 as biology or economics-accounting majors 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

800-442-2421
www.holycross.edu
E-mail: admissions@holycross.edu

## Expenses

## Tuition

$\$ 23,400$
Leave of Absence Fee, each semester 30
Room and Board 7,540
Graduation Fee 125
$\begin{array}{ll}\text { Health Service Fee } & 125 \\ & 240\end{array}$
Transcript 3
Student Activities Fee 165
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 non-refundable reservation deposit of $\$ 300$ 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 $\$ 400$ 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.

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 were 104 eligible calendar days in the 1999 Fall semester. If a student withdrew on the 50th day in the semester, the student's charges and financial aid would have been prorated to reflect that s/he was enrolled for 45.8 percent of the semester ( 50 divided by 109).

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 Federal Stafford Loan, Subsidized Federal 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.

## 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 has a financial aid policy that is supportive of its academic and spiritual goals as a Jesuit, undergraduate, liberal arts college.

In 1999-2000, the College administered a total of more than $\$ 29.1$ million in need-based financial assistance to more than 1,660 students.

Financial need is the difference between the cost to attend Holy Cross and the amount a fami$l_{y}$ is expected to provide towards the education of the student as determined by the College's professional staff. We use a conservative application of a needs-analysis procedure, Institutional Methodology, which is agreed upon by many members of the national College Scholarship Service Assembly. The approach to 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 that is used for federal Title IV assistance, which includes the Federal Stafford Loan Program, Federal Pell Grants, 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. The financial aid program at Holy Cross is generous and therefore all students, regardless of their socio-economic background, who want to attend the College are encouraged to apply and investigate all means of financial assistance.

A financial aid statement is required of both parents in cases where there is a separation or divorce. The non-custodial parent is required to file a Noncustodial Parent Statement. A Business/Farm Supplement is required in cases where the family operates or derives income from a business, a corporation, or farm. These are special forms and they are sent directly by the College Scholarship Service to families which need them and who have also filed the PROFILE Registration. 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 Ctoss' 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 needs analysis are conducted for each candidate each school year before financial aid packages are renewed.

## First-Year Students

To apply for assistance, an incoming student must indicate on the admissions application that he or she would like to be considered for Holy Cross financial aid. Also, a student must file both a Free Application for Federal Student Assistance (FAFSA) and register with the College Scholarship Service by filing a PROFILE document to be considered for both Federal Student Assistance and Holy Cross scholarships. Both the FAFSA and the PROFILE should 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 only for Federal Student Assistance. Both forms are available in secondary schools in the late fall. The deadline date to have credentials sent to the College Scholarship Service to be considered on-time for priority consideration for Holy Cross assistance is February 1. A student who fails to indicate that they wish to be considered for financial aid on the admissions application and later decides to apply for financial aid must do so by writing directly to the Director of Financial Aid indicating the change. Students who enroll and who have been tendered financial assistance will be tequired to submit to the Financial Aid Office true copies of both parent and student federal income tax returns for the immediately preceding year before final action is taken on their award. Alternate documentation is required in instances where a tax return is not filed by either party.

## Upperclass and Renewal Awards

Each year, Holy Cross students who receive College-administered financial assistance must file a new FAFSA and PROFILE, a Holy Cross financial aid application, and true copies of the federal income tax returns for the immediately preceding tax year. A packet of forms will be mailed after January 1 to each family that has received aid in the past year. They are also available in the Financial Aid Office. Students who wish to apply for financial assistance for the first time should follow this same procedure and indicate that they are first-time applicants. New awards to upper-class students are based on demonstrated need for assistance as determined by the College and the availability of funds. April 15 is the preferred closing date for submission of credentials for renewal of awards and new requests for assistance from upper-class students. 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 notification of awards in the case of a new request is made by August 15.

## Scholarships

Each year, more than 350 first-year students are awarded Holy Cross Scholarships with stipends ranging from $\$ 200$ to more than $\$ 23,400$, depending on the student's financial need. There are also a limited number of Special Achievement Scholarships that are not based on financial need and are renewable for four years. Applicants to the College do not apply for these scholarships: recipients are designated by the Admissions Committee based on superior achievement in secondary school. Each applicant is considered for all awards for which he or she may be eligible, including many endowed and restricted scholarships. For First Year applicants to Holy Cross no special application other than the FAFSA and the PROFILE is necessary to be considered for assistance at Holy Cross. In general, scholarship assistance will be renewed each year provided the student continues to demonstrate need for such assistance. Stipends, however, will be adjusted in accordance with col lege 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 Jersey, Pennsylvania, Rhode Island or Vermont to apply for the scholarship program in their home states. Application information is available either in high school guidance offices or the appropriate state agencies that are listed below. Since each state scholarship program has its own deadline for applications, it is advisable to determine their application deadline and to make application early in the academic year.

## Connecticut

Connecticut Scholastic Achievement Grant Program Department of Higher Education 61 Woodland St. Hartford, CT 06105

## Maine

Department of Educational \& Cultural Services
Higher Education Service
Vickery-Hill Building
State House Station 19
Augusta, ME 04333

Massachusetts
Commonwealth of Massachusetts Office of Student Financial Assistance
330 Stuart St.
Boston, MA 02116

## New Jersey

Department of Higher Education
Office of Student Assistance
CN 540
Trenton, NJ 08625
Pennsylvania
Higher Education Assistance Agency
660 Boas St.
Harrisburg, PA 17102

Rhode Island<br>Rhode Island Higher Education Assistance Authority<br>Grants and Scholarships<br>560 Jefferson Blvd.<br>Warwick, RI 02886

Vermont<br>Vermont Student Assistance Corporation P. O. Box 2000<br>Winooski, VT 05404

## Grants

## Pell Grants

The Federal Pell Grant Program provides grants directly from the Federal Government in amounts ranging from $\$ 400$ to $\$ 3,125$ per year, depending upon the financial circumstances of each family. 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. Processing time is approximately three weeks, after which a Student Aid Report (SAR) is returned to the student applicant by the Pell processor. The SAR should be forwarded to the Financial Aid Office at the College for final processing of the Federal Pell Grant.

## Federal Supplemental Educational Opportunity Grant (SEOG)

This is a limited 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 determining and selecting eligible students in this program as well as the amount of the award.

## Loans

## The Federal Stafford Student Loan Program

This is 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 non-subsidized. Each borrower must file a FAFSA in order to receive a determination of his or her eligibility for the interest subsidy. Student borrowers will have their applications processed electronically by the Financial Aid Office unless a student 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 $\$ 23,000$. 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 fulltime employment.

## Federal Perkins Loan

Holy Cross administers a limited number of loans under the authority of this Federal program. These loans carry an interest rate of 5 percent simple interest. 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 under this type of assistance will be extended to students who are determined by the College to be most in need for this loan.

## Federal Parent Loans for Undergraduate Students (PLUS)

This is a federal program and is in operation in most states. Parents may borrow up to the difference of the cost of education minus other financial aid each year. The rate of interest is variable based on the 52 -week Treasury Bill plus 3.1 percent-not to exceed 9 percent. The 2000-'01 rate is estimated to be 9 percent. Repayment of PLUS loans usually begins within 60 days after note signing and extends up to 10 years.

Processing a Federal PLUS loan begins with the family bank. If the lender does not participate the family should try another if it is possible to do so. Applicants who still need assistance in locating a lender should contact the Financial Aid Office.

## 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.

Under either plan parents can spread repayment over a 10 - or a 14 -year period at a guaranteed fixed rate or a variable interest rate, which is based on the interest rate for each bond issue. The borrower's rate for 2000 -'01 will be a fixed rate of $7.85 \%(8.49 \%$ APR) or a variable rate of $7.5 \%$ for 2000 which will be reset annually on April 1 . Current rates may be determined by calling $1-800$ -449-6332 from 9 a.m. to $5 \mathrm{p} . \mathrm{m}$. EST. Monthly payments for the fixed-rate loan in 2000-'01 will be about $\$ 9.84$ per $\$ 1,000$ borrowed and $\$ 9.63$ per $\$ 1,000$ in the variable-rate option.

The MEFA LOAN was developed by the MEFA 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; and
3. a centralized loan service to handle approval of credit, payment collection and record-keeping.
4. no prepayment penalty for early retirement of this loan

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 $\$ 1,300$ 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 the Counseling Center and Career Planning Office in Hogan Campus Center serves as a "clearing house" for 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. Additional information can be obtained by directly 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. Additional information 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 Staff. Please address correspondence to:

Financial Aid Office
College of the Holy Cross
1 College Street
Worcester, MA 01610-2395
(508) 793-2265

## 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.

## 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 inter' est 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.
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 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 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 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 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.

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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.
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 Scholarship I: 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 Crowley Family Memorial Scholarship II: Established in 1947 by bequest of Miss Bridget T. Crowley of Springfield, Mass. Conditions same as the Crowley Family Memorial Scholarship I.
The Crowley Family Memorial Scholarship III: Established in 1947 by bequest of Miss Bridget T. Crowley of Springfield, Mass. Conditions same as the Crowley Family Memorial Scholarship I.
The Crusader Council Knights of Columbus Scholarship: Established in June 1963, by a gift toward the establishment of a scholarship in honor of Rev. Joseph F. Busam, S.J., and in gratitude for his many years of service as Chaplain of the Crusader 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.
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 single-parent 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 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 by an anonymous donor 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 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.

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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.
Charles A. 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 '19 Scholarship: Established in 1994 from the estate of Anne F. Jolles in memory of her brother John K. Flynn '19.
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.
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.
The Glowik Family Basketball Scholarship: Established in 1997 by John P. Glowik '73. To be used for scholarships for members of the varsity men's and women's basketball teams.
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 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.
Father Hart 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.
The Rev. Frederick W. Heaney, S.J., Scholarship: Established in 1920 by Miss Lillian Heaney, in memory of her deceased brother, the Rev. Frederick W. Heaney, S.J.
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 Fund: 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.

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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 deserv" ing 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.
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: Founded in 1981 by Edward C. Maher ' 40 for needy students from the immediate Worcester area.
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 Marfuggi Memorial Fund: Established in 1974 in memory of Mr. and Mrs. Anthony P. Marfuggi. Scholarships 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: Established in 1999 by Mrs. Frank V. McBride in honor of her husband. Frank V. McBride ' 25.
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 memor ry 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.
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 to honor Charles E.F. Millard '54. Selection to be made by the President of the College.
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.

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 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.
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.
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 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, J. '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 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 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.
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 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.

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The Robert P. Trudel '64 Scholarship: Established in 1999 by members of the Class of 1964. The scholarship may be awarded to any son or daughter of a member of the Class of 1964 who notifies the Office of Financial Aid prior to the financial aid application deadline that he or she is a child of a member of the Class of 1964 and is applying for the Robert P. Trudel ' 64 Scholarship. If the Office of Financial Aid does not receive such notice prior to the financial aid application deadline, the scholarship shall be awarded to a student who is a graduate of Fairfield Preparatory School, of Fairfield, Connecticut or, if none, to any Holy Cross student who qualifies for financial aid.
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 Maurizio Vannicelli Memorial Scholarship: Established in 1991 by the family, friends and former students of Professor Maurizio Vannicelli.
The Samantha Vellaccio Scholarship: Established in 1999 by Brendan J. Cassin '55 in memory of Samantha Vellaccio to provide financial aid assistance with preference for a student who has a declared major in Biology.
The Clune J. Walsh, Jr. Scholarship: Founded by The Home Life Insurance Company and aug. mented 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 Pre-medical Scholarship Fund: Established in 1998 to provide scholarship assistance to Holy Cross pre-medical students.
The George J. White Memorial Scholarship Fund: Established in August, 1994 by a gift from George J. White '39.
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 Scholarship: 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 scholarships 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: Eastern Connecticut Holy Cross Club, Holy Cross Alumni Club of Worcester, Holy Cross Club of Boston, Holy Cross Club of Maine, Holy Cross Club of Long Island, Holy Cross Club of New York, Holy Cross Club of Rhode Island, Holy Cross Club of Merrimack Valley, Holy Cross Club of New Hampshire, Holy Cross Club of Rochester and 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 inclusivity 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 Judicial Affairs Coordinator, a Director of Multicultural Education, a Director of Public Safety, and a Director of Special Projects and Training.

## Office of Multicultural Education

The Office of Multicultural Education educates the College community about diversity, pluralism, race, and human relationships. Through classes, workshops, training sessions, and consultations, participants learn to actively translate multicultural theories into practice. Underlying our 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 dialogue and cross-cultural understanding. We are committed to fostering the continued development of caring, just communities that transcend socially constructed boundaries (such as race, class, sex, gender, ability/disability, age, and professional status).

## 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 and volunteer resident assistants (RAs). Resident assistants are third- or fourth-year 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 mem-
bers affiliate with each residence hall to enhance student-faculty relationships on a more informal level. These Faculty Associates often attend hall activities or plan off-campus outings. Other activities, such as informal get-togethers, cookouts, intramural games between corridors, as well as other more spontaneous activities, have proven to be successful and enjoyable ways to build a residence hall community.

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, 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. Student activities have long been considered an integral part of the College and all students are encouraged to participate in the wide range of organizations, events, and activities available.

Holy Cross has more than 80 student groups; new ones are added each year. They include cocurricular organizations devoted to academic pursuits, non-academic special interest groups, recreational clubs, campus service groups, print and broadcast media and performing troupes.

Most student activities are financed through funding from the student activities fee, and are administered by the Student Budget Committee, appointed by the Student Government Association (SGA). 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 and symposia. Major events in recent years sponsored by the CAB and other organizations have included speeches by Holocaust survivor and prominent author Elie Wiesel; noted scientist B. Gentry Lee; and civil rights activist Coretta Scott King. Recent Commencement speakers included Rev. Gustavo Gutierrez, known as the "Father" of Liberation Theology; former baseball commissioner Peter Ueberoth; New York Gov. Mario M. Cuomo; Martin Lee, chair of the Democratic Party of Hong Kong; and journalist Maria Shiver.

On the lighter side, entertainment events by outside groups and individuals, as well as by College organizations, play a major role in Holy Cross extracurricular activities. The Fenwick Theatre Company and the Alternate College Theatre are the major dramatic organizations on campus, while each year's fourth-year class traditionally presents a musical. Recent productions have included The Marriage of Bette and Boo; Sweeney Todd; Bye Bye Birdie; The Mystery of Edwin Drood; Godspell; Iolanthe; Guys and Dolls and Hair. Campus musical organizations include the College Choir, Jazz Ensemble, Crusader Marching Band, St. James Chamber Orchestra, Chamber Singers, the Holy Cross Gospel Ensemble, and Wind Ensemble, all of which present concerts throughout the year.

## Student Organizations

## Campus Activities Board

The Campus Activities Board ( CAB ) is the major programming organization providing social, cultural, and recreational events for the entire Holy Cross community. The group offers a wide variety of activities in the areas of performing arts, outings, special events, social events, and weekly entertainment in the Crossroads Pub and Pizza Parlor. Run by students, some of the bigger events this organization plans and promotes include Orientation activities, President's Council Weekend activ-
ities, and Spring Weekend activities, which include a major concert (performances in recent years have included The Samples, the Fugees and L.L. Cool J).

## Purple Key

The Purple Key Society is a campus service organization that sponsors special events and conducts major campus functions. Among its annual events are New Student Orientation, the Extracurricular Extravaganza, Family Weekend, 100 Days Banquet for fourth-year students, and the Sadie Hawkins Charity Ball.

## The Women's Forum

The Holy Cross Women's Forum is designed to meet the needs of women students by coordinating their activities on campus. It serves as a vehicle for communication between Holy Cross women and men through a variety of activities, including addresses by prominent individuals, and workshops and symposia on important issues.

## Black Student Union

The Black Student Union (BSU) is concerned with African-American students in the campus environment and with awareness of African-American history, culture and future potential. Each year, during African-American Experience Week, a series of events is presented that is intended to reinforce the cultural ties in the African-American community and to make the campus at large more aware of African-American culture. Recent African-American Experience Weeks have included appearances by Stokely Carmichael (Kwarme Ture), co-founder of the Black Panther Party; social activist and comedian Dick Gregory; Dr. Alvin Poussaint, psychologist, author and advisor for The Bill Cosby Show; Susan Taylor, editor of Essence Magazine; Reverend George Stallings of the African-American Catholic Parish in Washington, D.C.; and Cornell West, Harvard professor and best-selling author of Race Matters. African-American Experience Week also features dramatic productions performed by members of the BSU, poetry readings, convocations and workshops featuring speakers and discussions dealing with social justice, and various social events.

## Latin-American Student Organization

The purpose of the Latin-American Student Organization (LASO) is to create an atmosphere where Latin-American students who are not living in their native countries or communities can savor their heritage and educate the Holy Cross community on their traditions and culture. The organization sponsors campus-wide events such as Latin-American Experience Week, lectures, semi-formals, and cultural meals.

## Asian Students for International Awareness

The Asian Students for International Awareness (ASIA) helps coordinate and organize events to promote understanding of Asian cultures, issues and concerns. The group co-sponsors events with the Asian-Studies Concentration faculty to bring speakers, Asian movies, ethnic dances and open dialogue about Asian cultures to Holy Cross. This group also hosts ASIA Week, which offers students a week-long agenda of activities.

## The Bishop Healy Multicultural Awareness Society

Like the other groups for students of color, the Society is concerned with enhancing the understanding of the many cultures represented at Holy Cross. The club sponsors ethnic dinners, informal discussions with students and teaching assistants from abroad, and conversations about cultural biases, expectations, and stereotypes. The club also co-sponsors multicultural events, speakers, and symposia with the BSU, LASO, ASIA, and other campus organizations.

## Print and Broadcast Media

The communication media at Holy Cross are varied and active. The major vehicles of campus communication include Agora, an opinion journal; The Crusader, the weekly student newspaper; The Purple, a literary magazine; The Purple Patcher, the yearbook; the Women's Forum Journal; and WCHC-FM radio. The Holy Cross Daily News, a one-sheet, daily publication that lists events and campus news of interest to the entire community, is written and edited by students.

## Student Development

## Counseling Center

Students in college sometimes encounter personal problems that make their lives more difficult than need be. 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. 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.
- Counseling groups designed to address common student concerns such as stress management, assertiveness, personal growth, relationships, family problems, and eating disorders.
- Lectures and open discussions on topics related to human development that are of interest to students.
- Supervision, training, and consultation for resident assistants and other peer educator groups.
- Referral for a psychiatric evaluation provided through UMass Memorial Medical Center, University Campus.
The services offered at the Counseling Center are available to all current full-time students and are confidential. Students interested in making an appointment may call the Center (793-3363) or come to Hogan 207 from 9 a.m. to noon and 1 to 5 p.m.


## 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 Office 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 Office include: individual career counseling, career exploration groups, workshops, mock interviews, career panels, on-campus recruiting, resume referral, a credential file service, a career resource library, newsletters and a Web site.

The Office maintains a database of Holy Cross graduates who have volunteered to serve as career advisors for students and fellow alumni/ae. The Office also 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), The Fall Recruiting Connection, The Fall recruiting Consortium, and the Colleges of the Worcester Consortium.

Career Planning services are available to all students. The Office is in Hogan 203 and is open from 9 a.m. to 5 p.m.

## Summer Internship Program

Recognizing that completion of an internship is no longer value-added but a requirement for liberal arts students seeking employment with the most competitive employers, the Holy Cross Summer

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Internship Program is designed to provide exceptional, pre-screened Holy Cross undergraduates with an opportunity to gain meaningful career related experience in an area related to a student's occupational goals. Through a competitive application process, selected students will be eligible for paid internships with the nation's leading employers and organizations. Internships will be developed through the network of Holy Cross alumni throughout the country and earmarked and designed specifically for Holy Cross students. Internships are generally 8-10 weeks in length and ordinarily require a minimal commitment of 35 hours per week. The Summer Internship Program is located in the Career Planning Center, Hogan 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 the Holy Cross Health Service 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.

The Health Service staff consists of:

- Full-time and part-time registered nurses staffing the Health Service seven days a week during the academic year.
- Board-certified family-practice physicians affiliated with Memorial Health Care, Inc., as well as a Certified Adult Nurse Practitioner. On-site appointments are provided Monday through Friday, 20 hours per week.
Medical services provided include urgent care and limited primary care. Please review the Health Services Brochure for details of the services offered. Call (508) 793-2276 for appointments.

CPR and First Aid courses are provided throughout the academic year.
2000-2001 Medical Staff:
Janice A. Allen, M.S., R.N., C.S.
Director, Health Services/Nurse Practitioner

Christine M. Purington, M.D.<br>Consulting Medical Director

## 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 athletic teams. Intercollegiate sports for men are baseball, basketball, crew, cross country, football, golf, ice hockey, lacrosse, soccer, swimming, tennis, and indoor and outdoor track and field. Crusader women compete in basketball, crew, 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 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 Metro Atlantic Athletic Conference (MAAC).

## Clubs and Intramurals

The College sponsors co-ed clubs in equestrian, sailing, skiing, soccer, and ultimate Frisbee. For women, there are lacrosse and rugby clubs, while men participate in volleyball, rugby and water polo at the club level. The College also provides an active intramural program. Men participate in basketball and football at the intramural level. Women's intramural basketball is also a popular activity. Men and women compete together in softball 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, which was recently renovated, seats 23,500. A new eight-lane running track and lighted Astro-turf field has been installed.

The Hart Recreation Center serves as home to the Crusader basketball, swimming and hockey teams. In addition to the 3,600 -seat basketball arena, ice rink, and swimming pool with separate diving area, the Hart Center features squash and racquetball courts, locker and shower facilities, exercise equipment and a crew 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 workour 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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Associate Chaplain/Director of Liturgy
Rev. Michael F. Ford, S.J.
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Associate Chaplain

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Associate Chaplain
Rev. Gerard R. McKeon, S.J.
M.A., Gonzaga University
M.Div., Weston School of Theology
C.A.E.S., Boston College Institute of

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Assistant Chaplain/Director of Liturgical Music

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1 - On Leave 2000-2001
2 - On Leave Fall 2000
3 - On Leave Spring 2001

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John T. Anderson (June '01)
on leave, Spring ' 01
Division B
Phillip C. Rule, S.J. (June '01)
Division C
Nancy Rhein Baldiga (June '02)
Division D
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Kassia E.G. Smith '02

## Academic Affairs Council Ex Officio

Stephen C. Ainlay, Vice President for Academic Affairs/Dean of the College
Frank Vellaccio, Provost, Chair
Helen M. Whall, Speaker of the Faculty (June '02)
Teaching Faculty
Division A
Deborah J. Campbell, Chemistry (June '01)
Robert H. Garvey, Physics (June '02
Peter Perkins, Mathematics (June '01)
Madeline Vargas, Biology (June '02)
Division B
Charles A. Baker, Modern Languages and Literatures (June '01)
Michael L. Beatty, Visual Arts (June '02)
Edward Isser, Theatre (June '01)
Carol Lieberman, Music (June '01)
James J. Miracky, S.J., English (June '02)
Division C
Jill Dupree, Economics (June '01)
David M. Hummon, Sociology and Anthropology (June '01)
Suzanne R. Kirschner, Psychology (June '02)
Stephen A. Kocs, Political Science (June '02)
Division D
Shahzad Bashir, Religious Studies (June '01)
Ross W. Beales, Jr., History (June '02)
Ellen E. Perry, Classics (June '01)
Karsten R. Stueber, Philosophy (June '02)
Administrative Faculty
Michael F. Ford, S.J. (June '01)
James E. Hogan (June '02)
Students
Kenneth DeBlois '01
Kevin W. Germino '01
General Committees of the Faculty
Committee on Faculty Affairs
Division A
Kenneth N. Prestwich, Senior Rank (June '02)
Edward J. Soares, Junior Rank (June '01)

Division B
Amy Singleton Adams, Senior Rank (June '02)
Jessica Waldoff, Junior Rank (June '01)
Division C
Scott Sandstrom, Senior Rank (June '01)
Katherine A. Kiel, Junior Rank (June '02)
Division D
Karen L. Turner, Senior Rank (June '01) on leave, Fall 2000
Todd T. Lewis (January '01) replacing Prof. Turner
Nancy E. Andrews, Junior Rank (June '02)
At-Large
Mary E. Morton (June '01)
Committee on Tenure and
Promotion
Ex Officio
Stephen C. Ainlay
Frank Vellaccio
Teaching Faculty
Timothy P. Curran, Division A (June '01) on leave, '00-'01
David B. Damiano, Division A (June '02)
Richard S. Herrick, Division A (June '01) replacing Prof. Curran
James M. Kee, Division B (June '01)
Joanna E. Ziegler, Division B (June '02)
David K.W. Chu, Division C (June '01)
Andrew M. Futterman, Division C (June '02)
Noel D. Cary, Division D (June '01) on leave, '00-'01
Mark E. Lincicome (June ' 01 ) replacing Prof. Cary
Joanne M. Pierce, Division D (June '02)

## Standing Committees of the Faculty

Committee on Academic
Standing
Ex Officio
Stephen C. Ainlay
Ann B. McDermott
Elaine J. Rynders

## Teaching Faculty

Bertram D. Ashe (June '02)
Richard S. Herrick (June '02)
Brian F. Linnane, S.J. (June '01)
Kolleen J. Rask (June '01)
Committee on the Curriculum
Ex Officio
Stephen C. Ainlay
James E. Hogan
Elaine J. Rynders
Teaching Faculty
Division A
George R. Hoffmann (June '01)
Division B
Cynthia Stone (June '02)
Division C
Denise Schaeffer (June '01)
Division D
Alan Avery-Peck (June '02)
Students
TBA
Committee on Interdisciplinary and Special Studies

## Ex Officio

Gary P. DeAngelis, Associate Director
Susan M. Cunningham, Assistant Director
Richard E. Matlak
(Honors Program Director)
Amy R. Wolfson
(Women's Concentration Director)
Bertram D. Ashe
(African-American Studies Director)
Predrag Cicovacki
(Peace and Conflict Studies Director)
Edward H. Thompson, Jr.
(Gerontology Program Director)
Aldo A. Lauria-Santiago
(International Studies Director)
Teaching Faculty
Robert K. Cording (June '01)
Virginia C. Raguin (June '02)
Mathew N. Schmalz (June '01)
on leave, '00-'01
Kristina R. Sazaki (June '01)
replacing Prof. Schmalz
William E. Stempsey, S.J. (June '02)

Committee on Fellowships, Research and Publication
Charles S. Weiss (Ex Officio)
Division A
Kornath Madhavan (June '02)
Division B
James J. Miracky, S.J. (June '01)
Division C
John F. O'Connell (June '02)
Division D
William E. Reiser, S.J. (June '02)
Committees of the Faculty
Appointed by the Dean of the College
Committee on Study Abroad
Ex Officio
Maurice A. Géracht, Chair
Teaching Faculty
Sarah Stanbury (June '01)
Cynthia Stone (June '01)
Jane M. Van Doren (June '01)
TBA (3)
Committee on Premedical and
Predental Programs
Ex Officio
Andrew M. Futterman, Chair
Teaching Faculty
Susan Berman (June '02) on leave, '00-'01
Miles Cahill (June '01)
Glenn C. Jones (June '02)
Suzanne Kirschner (June '00)
Thomas M. C. Lawler (June '01)
Peter Parsons (June '01)
replacing Prof. Berman
William E. Stempsey, S.J. (June '03)
TBA (1)
Committee on Graduate Studies and Fellowships
Ex Officio
Mary Lee Ledbetter, Chair
Esther Levine
Joseph H. Maguire

Teaching Faculty
John Cull (June '03)
James Flynn (June '02)
Katherine Kiel (June '01)
William Morse (June '02)
College Committees Reporting to the President of the College Board of Directors of Alumni Association
John Hanilton (June '01)
Administrator TBA
Athletic Council
Ex Officio
Richard Regan
Frank Vellaccio
William R. Durgin
Teaching Faculty
John Carter (June '03)
Charles M. Locurto (June '01)
Brian C.L. Shelley (June '02)

## Campus Center Advisory

Council
Ex Officio
William R. Durgin
Jacqueline D. Peterson
Frank Vellaccio
Thomas W. Wiegand
Teaching Faculty
TBA (2)
Alumni
TBA (2)
Students
TBA (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 Rhonda L. Brown, Affirmative Action Officer, The College of the Holy Cross, Worcester, MA 01610, phone: (508) 793-3595.

The College Catalog is a document of record issued in September 2000. 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 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, cancelling 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 nongovernmental, 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.

## Policy on Harassment

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. Violations of criminal law, such as assault, rape, and hate crimes, will be dealt with accordingly. They are not the subject of this policy. Resources are, of course, available to assist any member of the community who has been a victim of such crimes.

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: submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment; submission to or rejection of such conduct by an individual is used as a basis for employment affecting that individual; or such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile, or offensive work environment" (EEOC, Guidelines on Discrimination Because of Sex).

Title IX of the Education Amendments of 1972 requires an educational institution to provide an environment free of discrimination on any grounds. It thus prohibits discrimination in employment and in the utilization of resources, and it prohibits harassment. 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 member of the community who is found after an investigation to have harassed another will be subject to appropriate discipline up to and including termination or expulsion 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. Physical attributes include, but are not limited to, race, sex, color, physical or mental handicap, age, ethnic origin, religion, economic class, and sexual orientation. Harassment may include physical contact such as touching or patting, written or verbal comments or suggestions, obscene or offensive pictures or "jokes," hostile or threatening gestures, or orher forms of degradation. Though harassment is often malicious in intent, even thoughtless or unpremeditated behavior can have the effect of harassment. Given the inherent imbalance of power, romantic and sexual relationships between a faculty member and a student, or between supervisor and employee are strongly discouraged.

A copy of informal and formal procedures for resolving complaints of harassment may be obtained from the Affirmative Action Officer. These procedures can also be found on the College's Web site, www.holycross.edu, under "general information."

## 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 attomey.

Holy Cross' director of planned giving, Mary C. Moran, is available to answer questions you or your attorney might have. Her phone number is (508) 793-2482.

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H O LY CROS S
1 College Street
Worcester, MA 01610-2395


[^0]:    Economics 217 - Money and Banking
    Alternate years
    Economic analysis and modeling techniques are used to better understand the workings of the
    financial system. Some of the topics include financial assets and markets, asset demand and portfolio choice, asset pricing, banking theory, banking and financial market regulations, money demand

[^1]:    History 235 - Poland and Ireland since 1815
    Alternate years in spring Comparative study of Polish and Irish nations, designed to illuminate the process by which traditional societies became modern: 1) Rise of modern nationalism to 1850; 2) "Organic Work" in Poland and "Home Rule" in Ireland, 1850-1922; and 3) The trials of independent small nations in 20th century. Poland and Ireland began the 19th century agrarian, Catholic, and dependent parts of multi-national empires. In the 20th century, both became independent nation states after century long struggle from economic, ideological, and social, as well as political, change. Both experienced special difficulties of small nations' efforts to achieve meaningful independence in the 20 th century. One unit.

[^2]:    Courses
    Psychology 100 - Introductory Psychology
    Fall, spring
    An introduction to the principles of psychology as emerging from the areas of physiological, learn- ing
    ing, social, personality, developmental, abnormal, sensation and perception, and cognition and memory. This course or Psychology 101 is required of psychology majors. One unit.
    Psychology 101 - Introductory Psychology
    An ingroduction to the principles of psychology as emerging from the areas of physiological, learn-
    ing ,
    Asychology 101 - Introductory Psychology
    An introduction to the principles of psychology as emerging from the areas of physiological, learn-
    ing, social ing, social, personality, developmental, abnormal, sensation and perception, and cognition and ${ }^{\text {mem mory. This course or Psychology } 100 \text { is required of psychology majors. Prerequisite: An intro- }}$ ductor ductory psychology course in high school. One unit.

[^3]:    $\mathrm{P}_{\text {Sychology }} 480$ - Research Projects
    Fall, spring
    tudents may undertake an independent research project under the direction of a particular faculty
    member. Prerequisite: Permission of instructor. One unit.

