## Carleton College 2010-2011 Academic Catalog

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The provisions of this catalog are subject to change without notice and do not constitute an irrevocable contract between any students and Carleton College.

As required by state and federal law, Carleton College does not discriminate on the basis of race, color, creed, religion, sex, national origin, marital status, sexual orientation, status with regard to public assistance, age, or disability in providing employment or in its educational programs and activities.

## Historically Speaking

Carleton College was founded by the Minnesota Conference of Congregational Churches, under the name of Northfield College, on November 14, 1866. Preparatory school classes began in September 1867, but it was not until 1870 that the Reverend James W. Strong took office as the first president, the first college class was formed, and the first on-campus building was begun. It was agreed at the outset that after one year formal church control should end, but throughout its formative years, the College received significant support and direction from the Congregational churches. Although it is now autonomous and non-sectarian, the College respects these historical ties and gives continuing recognition to them through membership in the Council for Higher Education of the United Church of Christ.

By the fall of 1871, the name of the College had been changed to honor an early benefactor, William Carleton of Charlestown, Massachusetts, who earlier that year had bestowed a gift of $\$ 50,000$ on the struggling young college. At the time, it was the largest single contribution ever made to a western college, and it was made unconditionally, with no design that the name of the College should be changed. As of June 30, 2009, the College had an endowment of $\$ 517$ million and assets valued at $\$ 808$ million.

Carleton has always been a coeducational institution. The original graduating class in 1874 was composed of one man and one woman who followed similar academic programs. Carleton's current enrollment of 1,986 (Fall 2009) includes nearly equal numbers of men and women.

## Mission, Vision, Values and Goals

The mission of Carleton College is to provide an exceptional undergraduate liberal arts education. In pursuit of this mission, the College is devoted to academic excellence, distinguished by the creative interplay of teaching, learning, and scholarship, and dedicated to our diverse residential community and extensive international engagements.

The College's aspiration is to prepare students to lead lives of learning that are broadly rewarding, professionally satisfying and of service to humanity. By discovering and sharing exemplary models of undergraduate education, the College seeks to be a leader among those colleges, universities, and professional organizations that share our dedication to this vision.

Carleton strives to be a collaborative community that encourages curiosity and intellectual adventure of the highest quality. Faculty, staff, and students respect one another for the serious work and the playful
humor we share, and we support each other in pursuing a healthy balance of mind, body, and spirit. Quiet reflection and lively engagement are valued as sources of self-understanding and renewal. Carleton honors thoughtful conversations about difficult questions as necessary for individual growth and community strength. The College works to embody the values of freedom of inquiry and expression and is vigilant in protecting these values within a culture of academic integrity, civil deliberation, and ethical action. Carleton aims to be welcoming and hospitable to its neighbors, guests, and the public, and a responsible steward of its resources.

Carleton's academic goals focus on developing the critical and creative talents of our students through broad and rigorous studies in the liberal arts disciplines. Mentored by dedicated faculty and staff, students become active members of a learning and living community that promotes the exploration of passionate interests and emerging avocations. Students learn higher order thinking skills: disciplinary inquiry, analysis of evidence, arts of communication and argumentation, and problem-solving strategies. In their chosen fields of study, students strengthen their capabilities for disciplinary and interdisciplinary research and artistic production. Students acquire the knowledge necessary for the continuing study of the world's peoples, arts, environments, literatures, sciences, and institutions.

Carleton develops qualities of mind and character that prepare its graduates to become citizens and leaders, capable of finding inventive solutions to local, national, and global challenges.

## Accreditation and Affiliations

Accredited by several associations, including the North Central Association of Colleges and Schools (since 1913), Carleton offers the Bachelor of Arts degree. Among the academic honor societies with chapters on the campus are Phi Beta Kappa and Mortar Board, scholastic honor societies and Sigma Xi, science honor society.

Carleton is a member of the Associated Colleges of the Midwest (ACM).
Carleton College is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago, Illinois 60602-2504. Phone 800-621-7440.

Carleton College is registered as a private institution with the Minnesota Office of Higher Education pursuant to sections 136A. 61 to 136A.71. Registration is not an endorsement of the institution. Credits earned at the institution may not transfer to all other institutions.

## College Governance

While the Board of Trustees is ultimately responsible for the existence and welfare of the College, most major decisions about policies affecting the nature and operation of the College are made by governance bodies composed of students, faculty, staff, and senior administrative officers. The campus governance system falls naturally into two divisions: educational policy, which is the province of the faculty, and policies concerning the life of the campus at large, which is under the care of an elected College Council. The faculty has the assistance in the making of educational policy of a student-faculty committee, known as the Education and Curriculum Committee (ECC), under the leadership of the Dean of the College. Five faculty and five students join with the Dean and one Associate Dean to make up the ECC. The College Council is chaired by the President of the College, and composed of five faculty, five students, and five staff (three of them senior administrative officers). The Council functions through
subcommittees called into being to deal with particular policy issues. The Budget Committee is a permanent subcommittee of the Council and is composed partly of Council members and partly of other students, faculty, and staff elected or selected to that particular service. The implementation of policies regarding student life on campus is the responsibility of the Dean of Students and her or his staff. The Committee on Student Life (CSL), made up of seven students, one faculty member, and two student life staff, advises the Dean of Students in such matters. Many other standing committees exist, with varying memberships, to make policy recommendations and to help administer various areas of the campus.

## Carleton Student Association

Every student is a member of the Carleton Student Association (CSA). Three officers and 18 senators are elected annually to serve as the Senate, CSA's legislative body. The Senate's duties include: the election of student members; creation of ad-hoc subcommittees; the management of the student activities budget; and the appointment of student representatives to standing committees. CSA also works with the Dean of Students Office to address issues of concern to students.

## The College: A Statistical Look

Carleton College is a co-educational, residential liberal arts college of modest size with a diverse student body and a distinguished faculty.

Carleton enrolls a significant number of National Merit Scholars, 75 in the class that enrolled in 2009, or 14 percent of the first-year class. This places Carleton as the top liberal arts college in the country enrolling a high proportion of first-year students as National Merit Scholars.

According to the most recent Alumni Survey (2009), 79 percent of respondents had earned or were studying for a post-graduate degree within ten years of graduation; 86 percent of those twenty years from graduation had earned or were studying for a higher degree. Among those twenty years from graduation, 24 percent had earned or were studying for a doctorate, 7 percent for a medical degree, 11 percent for a legal degree, and 8 percent for a degree in management. Carleton ranks third among liberal arts colleges in graduates who have earned doctoral degrees in academic fields between 1966 and 2006. In that period, according to the National Science Foundation Survey of Earned Doctorates, graduates of Carleton earned 2545 academic doctor degrees, including: 467 degrees in the life sciences, 455 in the humanities, 425 in the physical sciences, 340 in the social sciences, 202 in psychology, 178 in the geosciences, and 145 in education. In the period 1995 to 2004, Carleton ranked sixth among all national colleges and universities for the number of doctoral degrees earned when adjusted for the number of graduating seniors. For the most recent years available, 90 percent of Carleton students or alumni who applied to law school were accepted (2007-08), about 80 percent of those applying to medical schools were admitted (2007-08).

In fall of 2009-2010, 41 percent of Carleton's 1,986 students came from the Midwest, 19 percent from the West, 22 percent from the East, 9 percent from the South, and 10 percent from outside the United States. Approximately 20 percent are African American, Asian/Pacific Islanders, Hispanic, or Native American. 56 percent of Carleton students receive institutional based aid. Carleton has 217 full-time faculty, and 95 percent have a doctorate or a terminal degree in their field. The overall student/faculty ratio is $9: 1$. The average class size is 18 ; in the fall of 2009,61 percent of class sections had under 20 students, and 0.1 percent had over 50 students. Each year, students can choose from approximately 1000 courses in 37 majors and several interdisciplinary programs. 70 percent of students in the 2009
graduating class participated in off-campus study for Carleton credit at least once during their undergraduate years, with study in 53 countries.

In accordance with the Higher Education Act of 1965, as amended, the six-year graduation rate for the cohort that entered in fall, 2003 is 91.8 percent, and $89.1 \%$ of that cohort graduated in four years or less. The cohort that entered in fall 2001, $92.8 \%$ graduated within eight years of entering Carleton. Questions related to this report should be directed to Carleton's Office of Institutional Research and Assessment at 507-222-4284.

## The Campus

What now constitutes 1040 acres of campus, arboretum, and athletic fields started with two ten-acre tracts deeded to the infant college in 1867 by Charles M. Goodsell, a miller, and Charles A. Wheaton, Northfield editor.

Even before a class was held, the trustees authorized the executive committee "to enclose the grounds and improve the same by cultivation and planting trees." This concern for the students' environment is still an important aspect of the Carleton experience. As of today, Willis Hall has been joined by 44 others on campus, including 12 academic facilities, 11 on-campus residence halls, nine student apartment houses, four recreation and athletic facilities, a library, a chapel, an observatory and a campus center. The College also offers 26 off-campus student houses, including 13 cultural or language shared interest houses.

## Architectural Heritage

The history of Willis Hall, the oldest building on campus, is typical of many of Carleton's older facilities. While remaining true to their architectural heritage, they have served a variety of needs over the years, evolving-with the aid of judicious renovations-to meet the needs of an ever-changing institution.

Willis, for example, started out as an all-purpose building: it contained a men's dormitory, classrooms, offices, and a small chapel. Later, a bookstore and a post office were added. Still later, the building was transformed into a student union. In 1976, it was remodeled again, reverting to an academic building.

The following chronological listing of Carleton's buildings indicates their present function. For information on the history of each, consult Carleton: The First Century by Leal Headley and Merrill Jarchow.

Willis Hall 1872-economics, educational studies, political science offices, Learning and Teaching Center, classrooms, a seminar room; Goodsell Observatory 1887—archaeology laboratory, astronomy, 16-inch visual refractor telescope, 8-inch photographic refractor telescope, astronomy laboratory, environmental and technology studies, linguistics, other faculty offices; Scoville Hall 1896-Cinema and Media Studies; Gender and Sexuality Center, Intercultural Life Office, Student Support Services, The Write Place and classrooms.

Laird Hall 1906-English offices, classrooms, President and Deans' Offices, Registrar's Office, and administrative offices.

Sayles-Hill Campus Center 1910—student social, organizational and activity spaces, student post office, snack bar, bookstore, administrative offices, classrooms; renovated in 1979, addition completed in 1988. The Music Hall 1914-classrooms, practice rooms, music offices; Skinner Memorial Chapel 1916-chapel and offices; Burton Hall 1916—residence hall and dining hall; Nourse Hall 1917residence hall, and Nourse Theater.

Leighton Hall 1921—religion, history, philosophy, sociology and anthropology offices, classrooms, administrative offices; Davis Hall 1923—residence hall, Wellness Center; Evans Hall 1927—residence hall; Severance Hall 1927—residence hall, Dean of Students Office, Residential Life Office; Laird Stadium 1927-locker rooms, weight training area, football game field, eight-lane, 400-meter, allweather track, and student housing.

Boliou Memorial Art Hall 1949—gallery, studios, classrooms, and art and art history department offices, expansion and remodeling completed in 1995.

Laurence McKinley Gould Library 1956-950,000 volumes, 1500 journals currently received, access to over 11,000 full-text electronic journals, over 11,000 electronic books, 1772 electronic databases, 450 study spaces, 52 public access computers, computer lab, 18 group study rooms, classrooms, and staff offices. A $\$ 7.5$ million expansion project, completed in 1984, doubled the size of the Library. In 1996 it was renamed the Laurence McKinley Gould Library; Musser Hall 1958—residence hall; Myers Hall 1958-residence hall.

Olin Hall of Science 1961—physics, psychology offices, classrooms, auditorium, and laboratories, renovations completed in 1997; Goodhue Hall 1962—residence hall; The West Gymnasium 1964— basketball courts, swimming pool, locker rooms and offices of Physical Education, Athletics and Recreation department; Cowling Recreation Center 1965- gymnasium, pool, dance studio and offices; Watson Hall 1967—residence hall.

The Music and Drama Center 1971—concert hall seating 500 and theater seating 460 joined by gallery, ensemble rooms, practice rooms, and dressing rooms. Mudd Hall of Science 1975-geology and chemistry offices, laboratories and classrooms; renovations completed in 1997.

Johnson House and Alumni Guest House 1992-linked structures, Johnson House contains offices and support space for Admissions, and the Alumni Guest House has guest quarters, a faculty and staff lounge and a meeting room. Center for Mathematics and Computing 1993-mathematics and computer science department offices, the Math Skills Center and library, Institutional Technology Services, including three computing laboratories, training room, administrative offices and classrooms. Hulings Hall 1995-biology department offices and portions of the psychology department, teaching and research laboratories, and greenhouse.

Recreation Center 2000-climbing wall, aerobic/dance studio, fitness center, racquetball courts, and field house with 200 meter indoor track, surrounding four infield courts for volleyball, tennis and basketball.

Language and Dining Center 2001—Asian languages, classical languages, German and Russian, French and Spanish and Cross-Cultural Studies Offices, The Language Center, classrooms, seminar rooms, 400 -seat dining hall.

Student apartment houses 2001-nine two- and three-story houses (Brooks, Collier, Colwell, Dixon, Eugster, Hunt, Nason, Owens, and Scott) offer 23 apartments accommodating 100 students.

Plans are underway to transform the former Northfield Middle School building, now known as The Arts Union, into a facility geared toward creative collaboration. This center will provide the space for all academic departments and students to work together in imaginative and transformative ways that support and feature a re-imagined curriculum.

Cassat and Memorial Hall 2009—two four-story residence halls located on the southeast side of campus and linked by an underground tunnel. They house 230 students from all class years, with more than half living in traditional singles and doubles in Cassat Hall and nearly 100 living in suites in Memorial Hall. Both halls have been designed with an eye toward sustainability and include numerous shared spaces to encourage community life and innovative features.

Carleton College is in the process of turning the former Northfield Middle School into The Arts Union, a facility geared toward creative collaboration that will support multiple student and classroom projects and allow faculty members to teach with words, images, sounds, and narrative in a variety of media.

In addition to housing the departments of Cinema and Media Studies (CAMS), and Theater, and Dance, the space will include a teaching museum, a dramatic theater, a cinema theater, dance studios, classrooms and a coffee shop. The building will also be home to the Presentation, Events and Production Support (PEPS) office and the Digital Asset Resource Center, a shared, interdisciplinary laboratory for exploring and learning to use technology. The first phase of construction is scheduled to be complete in Fall of 2011.

## Sustainability

Carleton College recognizes that it exists as part of interconnected communities that are affected by personal and institutional choices. We are dedicated, therefore, to investigating and promoting awareness of the current and future impact of our actions in order to foster responsibility for these human and natural communities. Carleton strives to be a model of environmental stewardship by incorporating ideals of sustainability into the operations of the College and the daily life of individuals. The College owns a $\mathbf{1 . 6 5}$ megawatt wind turbine expected to produce more than five million kilowatt hours of electricity annually, which is enough to power approximately 500 houses. Over the life of the turbine, about 100-120 million kilowatt hours of non-polluting energy will be produced. The College is committed to being a more environmentally sustainable campus and committed to using the natural energy flows of the region to contribute to the sustainability of the community.

Cassat Hall and Memorial Hall, with exteriors of durable brick, stone, and clay tile, are of an environmentally sustainable design, as certified by the Leadership in Environmental and Energy Design (LEED) system and will earn a LEED gold rating by complying with the U.S. Green Building Council's standards in sustainable design, construction, and operation. Solar thermal roof panels (made in Minnesota) on Cassat Hall are designed to heat $50 \%$ of the domestic water. Renewable energy is generated on-site to utilize energy from the sun to pre-heat water and reduce the environmental impacts of convention energy sources. Photovoltaic (PV) solar roof panels on Memorial Hall generate renewable energy on-site to convert energy from the sun into electricity to power the buildings.

## Academic Programs

Well over a century ago, Carleton started promising its students a "liberal and thorough" education. That goal is embodied still in the College's requirements for graduation, which are designed to expose students to a wide variety of disciplines, as well as to allow them to concentrate on a major subject.

## Graduation Requirements

## (Entry level students who matriculate fall 2010 and subsequent terms)

To receive a Bachelor of Arts degree from Carleton, a student must earn at least 210 credits and a cumulative grade average of $\mathrm{C}(2.0)$ or better.

A good liberal arts education requires not only rigor and depth, but also sufficient breadth to expose students to a wide range of subjects and methods of studying them. The college seeks to insure that its students study one field in depth by requiring a major. It encourages students to acquaint themselves with the major divisions of knowledge and modes of inquiry by requiring them to complete six credits with grades of S or C - or better from each of six curricular exploration areas.

Students must also complete an Argument and Inquiry seminar and fulfill requirements in writing, quantitative reasoning, international studies, and intercultural domestic studies, demonstrate proficiency in a second language, complete four terms of physical education, and complete a major and an integrative exercise within the major. Successful completion of all course and credit requirements requires grades of C - or better in each course.

Finally, students must spend six academic terms in residence at Carleton, including their senior year (last three academic terms), and earn at least 108 credits while enrolled at Carleton.

Argument and Inquiry Seminars (AI) - $\mathbf{6}$ credits All first-year non-transfer students must take an Argument and Inquiry (AI) seminar in their first term. Each fall term, the College offers over thirty AI seminars designed to introduce students to a liberal arts approach to learning and to develop the critical and creative skills they will need to thrive in academic work at Carleton. Offered in many different subject areas across the curriculum, AI courses share certain structural elements and a set of common goals. AI courses are small, discussion-based seminars, and carry the WR (writing rich) designation. Designed to foster students' intellectual independence, these courses develop habits of critical thinking, clarify how scholars ask questions, and teach students how to find and evaluate information in reading and research and to use it effectively and ethically in constructing arguments. Encouraging students to become collaborative learners and active members of Carleton's learning and living community, AI seminars strengthen students' habits of cooperation with peers and offer opportunities and tools for critical reading, deliberative discussion, and effective college-level writing.

## Curricular Exploration Requirements - $\mathbf{3 6}$ credits; $\mathbf{6}$ credits in each of $\mathbf{6}$ areas

Science with Lab (LS)Modern citizenship requires an understanding of the processes and methods of the natural sciences. At least six credits are required in courses that focus on developing an appreciation of the scientific study of the natural world. Courses must include a lab component to qualify. In the case of a student using a six-credit course/two-credit lab pair to satisfy the LS requirement, a grade of C- or better must be earned in each paired course.

Formal or Statistical Reasoning (FSR) The development of logical systems, formal models, abstract mathematical reasoning, and statistical reasoning has been foundational to intellectual development in
many disciplines. At least six credits are required in courses that focus on methods of formal reasoning including mathematics, logic, and the design and analysis of algorithms or statistical reasoning.

Social Inquiry (SI) The study of human and social behavior and how these are shaped by, and shape, socially constructed institutions is essential to a liberal education. At least six credits are required in courses that focus on the variety of disciplinary approaches to the study of individuals and societies.

Arts Practice (ARP) The act of imagining and creating art is an important way of understanding and knowing art and the creative process. At least six credits are required in courses in which students develop an appreciation of artistic creative practice through experience.

Humanistic Inquiry (HI) At least six credits are required in courses in which students are introduced to humanistic inquiry with an emphasis in its historical, cultural, ethical, and/or intellectual contexts.

Literary/Artistic Analysis (LA) At least six credits are required in courses in which there is an emphasis on analysis of literature or the visual and performing arts.

Writing Requirement The ability to write well is particularly important in college, not only as a means of demonstrating mastery of material, but as part of the process of coming to that mastery. For many people, writing well is a life-long learning process. As students develop greater understanding of themselves, the world, and language, they become more adept at expressing precisely, and perhaps eloquently, what they have in mind. The Carleton Writing Requirement is meant to be a checkpoint on that journey, not the final destination. It is a measure of progress and assurance that Carleton students are on the right path, and that with continued learning, they will develop into fully competent writers by graduation.

To guide students as they begin to work on writing at the college level, the College has developed some general criteria for good writing at Carleton. Although individual assignments, genres, or disciplines may place more or less emphasis on each criterion, faculty agree that student writing should feature the following:

1. The rhetorical strategy should be appropriate for the audience and purpose.
2. If argument is a part of the rhetorical strategy, it should contain a thesis and develop that thesis with coherence, logic, and evidence.
3. Whatever the purpose, writing should be as clear, concise, and interesting as possible.
4. Narration, description, and reporting should contribute to analysis and synthesis. The parts of a paper should lead to a greater, connected whole.
5. Writing should be edited to address surface error, including irregularities in grammar, syntax, diction, and punctuation.

Students are required to successfully complete 1) the AI seminar (WR1), 2) six credits of additional coursework designated WR2 and 3) successfully complete a writing portfolio to be reviewed by faculty after the third term, and no later than the sixth term.

Language Requirement Language is the way that members of a culture organize and encode their thoughts, allowing them to communicate with each other. Moreover, language shapes one's relationship with other people, and different languages will shape that relationship differently.

At Carleton we think that a liberally educated student should understand the way language is embedded within cultural practices and worldviews. To this end, we expect students to cross linguistic borders, experiencing another language "from the inside." In addition to the primary benefits a degree of competency in a language can offer (including basic communication, the ability to read foreign texts, and interaction with those of a different culture), the study of a foreign language provides students with a fuller understanding of the role played by their own native tongue. Also, crucially, it requires each student to experience the challenges of dealing with other cultures and peoples on their own terms. Language learning at Carleton, therefore, advances and supports the stated values and goals of the College's Mission Statement.

The four basic language skills for most modern languages (reading, speaking, aural comprehension, and writing) are mutually reinforcing as well as individually valuable, although the emphasis will vary among different language sections and individual teaching styles. In special cases, students' strengths (in speaking, for instance) might make up for weaknesses in reading and writing, and vice versa.

The requirement aims to assure that students will acquire a usable level of competence in a second language. This competence is demonstrated either (a) through successful completion of a fourth-level language course (fifth-level in Arabic, Chinese or Japanese) or (b) through acceptable performance on a standardized or departmentally designed examination. Fluent speakers of second languages may ask to be tested for fulfillment of the requirement or, in the case of languages not offered at Carleton, may ask that testing be arranged. Students whose native language is other than English may fulfill this requirement by demonstrating competence in their native language, as well as English.

Entering students may fulfill the requirement by satisfactory performance on a College Board Advanced Placement or Achievement test, International Baccalaureate Higher Level examination or on another placement examination most appropriate for the particular language. Students who have not taken such a test before entering the college should take the language placement examination either during the summer prior to matriculation or during their first week at Carleton. Students beginning their study of language, as well as those who need more study to complete the requirement, should enroll in language in their first year.

Students who complete language courses equivalent to courses 101 through 204 (205 in Arabic/Chinese/Japanese) at domestic post-secondary institutions after being enrolled at Carleton may take the appropriate placement or proficiency examinations to gain advanced standing or exemption. Credit toward the degree is typically not awarded, however.

Language study at Carleton aims at far more than the satisfaction of the requirement. Students are encouraged to increase their proficiency through advanced courses and study abroad and to apply their language skills in their academic work in other areas. With this foundation, language will enrich their studies at Carleton and enable graduates to become contributing members of the multi-cultural world.

Quantitative Reasoning Encounter (QRE) - Three courses Students will complete three courses that have been designated as providing quantitative reasoning encounters (QRE). Quantitative reasoning the inclination and ability to interpret, assess, and use quantitative information in one's scholarly work, civic activities, and personal life - is recognized by the College as a vital part of a liberal education for
each student. Through multiple exposures to examples of quantitative reasoning a student will better appreciate the ways that quantitative evidence is developed and used. Courses offering meaningful opportunities for this exposure will be designated as quantitative reasoning encounters.

The goal of the requirement is to increase students' appreciation for the power of QR and to enhance their ability to evaluate, construct, and communicate arguments using quantitative information. A course designated as a "Quantitative Reasoning Encounter" (QRE) will include at least one substantial assignment or module designed to enhance one or more of the following QR skills:

1. Possessing the habit of mind to consider what numerical evidence might add to the analysis of a problem;
2. Identifying appropriate quantitative or numerical evidence to address a question;
3. Locating or collecting numerical or quantitative data;
4. Interpreting numerical evidence properly including recognizing the limitations of methods and sources used;
5. Effectively communicating arguments that involve numerical or quantitative evidence.

Since an example of work demonstrating an ability to employ quantitative or numerical evidence in arguments is an element of the Writing Portfolio, students are strongly advised to take QRE courses early in their academic careers.

International Studies (IS) - $\mathbf{6}$ credits Courses that meet the IS requirement contain a geographic scope broader than the United States and by pedagogy and/or content develop in students an understanding of other perspectives on global, comparative, and historical subjects. Courses mostly focused on the United States but with a notable comparative or transnational component may satisfy the requirement.

Intercultural Domestic Studies (IDS) - 6 credits Courses that meet the IDS requirement focus on the United States. Course content addresses the role of identity and status in shaping the experiences of American society. Scope of instruction can be historical and comparative and include opportunities for reflection.

Physical Education: Four terms of Physical Education activity are to be taken by each student. Only one activity per term may count toward this requirement. The Physical Education program includes a variety of activity courses, designed to appeal to students. We believe that physical activity can contribute to students' health and well-being now and in the future.

A Major Field of Study: Carleton students choose a major during the third term of their sophomore year. The number of credits required of students in major fields varies by department. Grades earned in required courses in the major department must be "C-" or better. Successful completion of an "integrative exercise" (see below), typically during the senior year, is also a requisite for graduation. With the permission of the Academic Standing Committee, double majors are allowed.

Special Majors: A student seeking a major not offered in the College's established curriculum may propose a self-designed special major for approval by the Academic Standing Committee. All special majors involve close consultation with two faculty advisers. Students are expected to petition for special majors during the sixth term of their academic career. For additional information, see one of the Associate Deans of Students.

Integrative Exercises vary from department to department. Intended to help students relate the subjects they have studied in their major field, they sometimes take the form of comprehensive examinations covering the fundamentals of the discipline. In other departments, extensive research projects, papers or public lectures are required. Departments may award a minimum of three and a maximum of fifteen academic credits for the integrative exercise. For more information, refer to the individual departmental listing or speak to the department chair.

Residence Requirements: Normally it takes four years to complete the work for graduation, of which at least six terms, including the senior year (last three academic terms), must be spent in residence at Carleton. Some exceptions to the senior residency rule may be given by the Academic Standing Committee.

## Academic Regulations

Academic policies are published in the on-line handbook "Academic Regulations and Procedures" on the Dean of Students' Web page. This is the publication of record in matters regarding academic policies.

Course Load: Carleton's academic year is comprised of three 10 -week-long terms. Students normally carry 18 credits per term. They may take as few as 12 and, on occasion, as many as 22 , or, with special permission, 24, although such heavy course loads are discouraged. Students usually carry three courses each term. The standard course unit is six credits; for purposes of transfer evaluation six credits are comparable to three and one-third semester hours. Although all standard courses carry equal credit, laboratory courses at Carleton are equivalent to those in other colleges that grant five semester hours.

Examinations: Two and a half-hour-long written examinations are held at the end of each term for many courses. The Registrar sets the testing schedule.

Grades: Carleton's grading system is as follows: A=Excellent work of consistently high quality, usually showing notable understanding, insight, creativity, or skill and few weaknesses; $\mathbf{B}=\mathbf{G o o d}$ work of good quality, showing understanding, insight, creativity, or skill; $\mathbf{C = S a t i s f a c t o r y ~ w o r k ~ t h a t ~ i s ~}$ adequate, showing readiness to continue study in the field; $\mathbf{D}=$ Passing work that is minimally adequate, raising serious concern about readiness to continue in the field, creditable; $\mathbf{F}=\mathbf{F a i l i n g}$ work that is clearly inadequate, unworthy of credit. In computing grade point averages $\mathrm{A}=4.0, \mathrm{~A}-=3.67, \mathrm{~B}+=$ $3.33, \mathrm{~B}=3.0, \mathrm{~B}-=2.67, \mathrm{C}+=2.33, \mathrm{C}=2.0, \mathrm{C}-=1.67, \mathrm{D}+=1.33, \mathrm{D}=1.0, \mathrm{D}-=.67, \mathrm{~F}=0$.

A student may elect to take up to 30 credits S/CR/NC (Satisfactory/Credit/No Credit) during the four years at Carleton, and only up to six credits in any one term. $\mathrm{S}=\mathrm{A}$ through $\mathrm{C}-; \mathrm{CR}=\mathrm{D}+, \mathrm{D}, \mathrm{D}-; \mathrm{NC}=$ F.

Courses dropped after the two week registration drop/add period are recorded on the transcript as "DRP". This is a non-punitive notation.

Written Evaluations of Course Work: At the end of any course, a student may request a written evaluation from his or her instructor. The request must be granted if the course has an enrollment of 20 or fewer students.

Academic Progress: Carleton students are normally expected to complete their work in four years and may be dropped from the College if they have not earned at least 42 credits and a cumulative GPA of
1.8 at the end of three terms; 96 credits and a GPA of 1.9 at the end of six terms; and 150 credits and a GPA of 2.0 at the end of nine terms. (These are the lower limits allowed and do not indicate normal progress; that is closer to 54 credits, 108 credits and 162 credits, respectively.) For graduation, a minimum of 210 credits and a GPA of 2.0 is required. A student whose record in the judgment of the Academic Standing Committee indicates an inability to fulfill the College requirements for whatever reason may be suspended or dismissed at the end of fall or winter term as well as at the end of the academic year.

Summer Study: Carleton does not ordinarily give degree credit for courses taken elsewhere during the summer. Permission may be given, if there are convincing academic reasons, but it must be requested in advance from the Academic Standing Committee, and the department chair may specify at that time that credit will be granted only upon special examination after the completion of the course. Petition forms for the approval of credit for summer courses may be obtained in the Dean of Students Office.

Credit by Examination: Students can obtain credit for courses offered at Carleton, when appropriate material has been mastered independently of Carleton class instruction, by taking special examinations. During the school year, a petition for credit by examination must be submitted to the Registrar at least two weeks before the date of the examination; the credit earned is included in the 22-credit maximum allowed per term.

Academic Honors: Students are graduated with "Distinction in a Major" if they achieve distinction in the departmental integrative exercise and a cumulative grade point average of 3.50 in all departmental courses taken in the major. Outstanding seniors in the field of music performance will be selected by Music faculty for the "Honors in Music Performance" award.

Students who have outstanding records in all course work will earn the Bachelor of Arts degree with honors, either cum laude (for a GPA of 3.25 or better), magna cum laude ( 3.50 or better), or summa cum laude ( 3.90 or better).

The honor of "Dean's List" may be earned by first-year students, sophomores and juniors whose previous academic year's GPA places them in the top 10 percent of their class. Eligibility for Dean's List assumes three terms of academic work, the bulk of which is done at Carleton. Students on nonCarleton off-campus programs for one term are eligible for Dean's List if their off-campus grades are comparable to those they maintained at Carleton. Students off campus for two or more terms on a nonCarleton program are not eligible in that year. Students on leave for a term are not eligible in that year. This honor is recognized at Opening Convocation in September of the following year.

Certificate of Advanced Study in Foreign Language and Literature or Foreign Language and Area Studies: With the Certificate of Advanced Study in Foreign Language and Literature or Area Studies the College recognizes satisfactory completion of the equivalent of a minor field of specialization in the indicated language. To achieve the certificate, students must complete with a grade of C- or better six courses in the chosen language or area studies group beyond 103 (204 in Asian Languages). Although courses for the certificate may be taken on an S/CR/NC basis, "D" or "CR" level work will not be sufficient to satisfy course requirements. Students who place out of 204 must still complete the six-course requirement. Courses that count toward the certificate and their distribution are indicated in the descriptions of the respective language department offerings in the Catalog. In order to be certified as having fulfilled the requirements, students must submit an application listing courses completed and intended no later than fall of the senior year. Applications are available in the department offices.

## Courses of Instruction

The following pages list courses offered at the College. They also contain general information about various departmental programs and their requirements for a major. In addition to departmental listings, offerings are organized by area studies, special courses of study, and by concentrations, interdisciplinary programs which complement, strengthen and build on departmental offerings. Opportunities for Carleton off-campus programs follow.

Courses are numbered with the following general scheme:

- 000-189 Introductory
- 100 Argument and Inquiry Seminar
- 200-289 Intermediate
- 290 Independent Reading
- 291 Independent Study
- 292 Independent Research
- 293 Internship
- 298 Junior Colloquium
- 300-389 Advanced
- 390 Independent Reading
- 391 Independent Study
- 392 Independent Research
- 393 Internship
- 395 Advanced Seminar
- 397 Senior Tutorial
- 398 Senior Colloquium
- 399 Senior Thesis
- 400 Integrative Exercise

Independent Study, Reading and Research: A student may pursue independent study, independent research or independent reading in more than one term. Course credit for these various independent study options is determined by arrangement with the instructor before registration, and may be for one to six credits. Although not noted separately under departmental course listings, independent study options are available across the curriculum. Forms are available in the Registrar's Office and on-line on the Registrar's Office Web page. Independent study in any form, including internships, does not count toward distribution requirements.

Independent Study: All departments offer "Independent Study," in which a student may work on a special project of his or her own planning under the supervision of a faculty member in the department. Ordinarily, this work is not on the introductory level. By registration time for the term in which the study is done, the student is expected to obtain a faculty supervisor in the chosen field of concentration and, with his or her assistance and approval, determine the nature and purpose of the study and the number of credits to be assigned.

Independent Reading: Offered within departments or on a cross-disciplinary basis, this program is not to be confused with the advanced research done in independent study. The emphasis in independent reading is on topics or areas not currently offered in Carleton's curriculum. Faculty who have developed these reading courses provide students with such aids as a detailed syllabus which includes recommended readings and problems or questions to serve as study guides.

Internships: Credit or non-credit internships, paid or unpaid, are a form of independent study with field work activity. This type of experiential learning offers the student the opportunity to enhance and complement classroom learning by working in a social, business, political, cultural or community organization. The Career Center provides information on established programs or assists students with developing their own. Internships can be thought of as a testing tool. They provide first-hand knowledge which is valuable when a student makes decisions such as choosing a major, applying for a job, or planning graduate study. Credit may be awarded if a faculty member agrees that the internship augments or extends in significant ways an area of instruction. Credit internships may be paid or unpaid if they are off-campus. On-campus credit internships may not be paid. All credit internships are under the supervision of the Career Center and a faculty member.

Advanced departmental seminars (395): are usually open only to departmental majors, or by consent of the instructor involved. Because the topics vary from year to year, some students are able to register for more than one departmental seminar during their college program.

Special Interest: While we do not offer a program in these areas, the following courses are available.

## 1) Studies in Ethics

- AMST 251 Extraordinary Bodies
- BIOL 115 Bioethics
- BIOL 116 Biotechnology, Health \& Society
- ENGL 272 A Journey in Journalism
- ENTS 246 Environmental and Agricultural Politics of the Americas
- ENTS 253 Social and Environmental Movements of Latin America
- HIST 130 Early Christian Thought
- HIST 285 Topics in Historical Ethics
- IDSC 263 Uses \& Abuses-Behavior Research
- PHIL 100 Evolution and the Mind
- PHIL 213 Ethics
- PHIL 242 Environmental Ethics
- PHIL 274 Existentialism
- PHIL 395 Freedom and Responsibility
- POSC 259 Justice Among Nations
- PSYC 371 Evolution \&Developmental Trends-Cognition
- RELG 118 Religion and the Ethical
- RELG 246 Religion and Black Freedom Struggle
- RELG 248 Religion, Law, Religious Law
- RELG 249 Religion and American Public Life
- RELG 319 Bioethics: Christian Approaches
- RELG 323 Scriptures and Hermeneutics
- RELG 330 Racial Pacifism
- SOAN 157 Culture and Politics in India
- THEA 275 Topics in Theater History


## 2) Health Issues

- BIOL 101 Human Reproduction and Sexuality
- BIOL 116 Biotechnology, Health \& Society
- BIOL 230 Introduction to Pharmacology
- BIOL 234 Microbiology with Laboratory
- BIOL 232 Human Physiology
- BIOL 310 Immunology
- BIOL 370 Topics in Virology
- BIOL 372 Topics: Exercise Biochemistry
- BIOL 384 Oncogenes \& Molecular Biology of Cancer
- BIOL 385 Microbial Pathology
- BIOL 386 Neurobiology
- BIOL 388 Molecular Mechanism of Drug Action
- CHEM 100 Air Pollution and Human Health
- CHIN 115 Taoist Way-Health \& Longevity: Taichi
- HIST 195 American Environmental History
- PSYC 260 Health Psychology
- PSYC 263 Sleep and Dreaming
- PSYC 318 Psychopharmacology
- PSYC 369 Behavioral Medicine
- PSYC 376 Neural Plasticity
- RELG 319 Bioethics: Christian Approaches
- SOAN 150 Who Cares and Who Gets Care, Women and Health
- SOAN 262 Health \& Illness


## 3) Philosophy of Science

- PHIL 210 Logic
- PHIL 250 Philosophy of Physics
- PHYS 120 Revolutions in Physics
- PSYC 365 Science and Pseudoscience


## 4) Social Thought

- AMST 345 Theory \& Practice American Studies
- CCST 210 Global Local Perspectives
- CHIN 357 Contemporary Social Issues
- ECON 250 History of Economic Ideas
- EDUC 245 History of American School Reform
- ENTS 246 Environmental and Agricultural Politics of the Americas
- ENTS 253 Social and Environmental Movements of Latin America
- HIST 130 Early Christian Thought
- HIST 239 Britain c1485-1834, From Sceptered Isle to Satanic Mills
- PHIL 232 Social and Political Philosophy
- POSC 160 Political Philosophy
- POSC 250 Ancient Political Philosophy
- POSC 251 Modern Political Philosophy
- POSC 258 Politics and Ambition
- POSC 259 Justice Among Nations
- POSC 276 Arendt: Imagination and Politics
- POSC 349 Ideology and Power
- POSC 350 Ancient Political Philosophy
- POSC 350 Political Philosophy and the Book of Genesis
- PSYC 252 Personality
- PSYC 256 Social Behavior \& Interpersonal Process
- PSYC 371 Evolutionary Trends-Cognition
- PSYC 382 Topics Social \& Personality: Ending
- PSYC 382 Social \& Personality: Relationship
- RELG 118 Religion and the Ethical
- RELG 246 Religion and Black Freedom Struggle
- RELG 248 Religion, Law, Religious Law
- RELG 264 Islamic Politics
- RELG 300 Issues in Study of Religion
- RELG 323 Scriptures and Hermeneutics
- RELG 330 Radical Pacifism
- SOAN 111 Introduction to Sociology
- SOAN 157 Culture and Politics in India
- SOAN 233 Life Work of Anthropologist-Sahlins
- SOAN 240 Methods of Social Research
- SOAN 262 Anthropology of Health and Illness
- SOAN 330 Sociological Thought \& Theory
- SOAN 331 Anthropological Thought \& Theory
- SOAN 332 Contemporary Social Theory
- THEA 100 Performing Roles
- THEA 225 Performing Shakespeare
- THEA 252/352 African-American Theater
- WGST 231 Race, Gender and Sexuality
- WGST 234 Feminist Theory
- WGST 396 Transnational Feminisms


## 5) Legal Studies

- ECON 275 Law and Economics
- ENTS 246 Environmental and Agricultural Politics of America
- HIST 100 Trials in Early America
- HIST 238 Church, Papacy and Empire
- POSC 206 The American Courts
- POSC 271 Constitutional Law I
- POSC 272 Constitutional Law II
- POSC 311 Topics in Constitutional Law
- RELG 246 Religion and Black Freedom Struggle
- RELG 248 Religion, Law, Religious Law
- RELG 249 Religion \& American Public Life
- RELG 264 Islamic Politics
- RELG 330 Radical Pacifism
- RELG 363 Islamic Law
- SOAN 202 Women, Crime and Criminal Justice
- SOAN 221 Law and Society
- SOAN 303 Criminology
- THEA 221 Rhetoric: Persuasion \& Debate


## 6) Academic Civic Engagement: Applied

- AMST 252 Ethnic Foodways in the United States
- CAMS 285 Community Video
- CHEM 100 Air Pollution and Human Health
- ENTS 253 Social and Environmental Movements of Latin America
- GEOL 210 Geomorphology
- CGSC 385 Cognitive Development
- MUSC 192 African Drum Ensemble
- PSYC 260 Health Psychology
- RELG 130 Native American Religions
- SOAN 275 Community Need Assessment Evaluation
- SOAN 276 Comparative Welfare System
- SOAN 285 Ethics of Civic Engagement
- SPAN 204 Intermediate Spanish (Doleman)


## 7) Academic Civic Engagement: Theoretical

- ECON 270 Economics of the Public Sector
- ENTS 100 Science, Tech \& Public Policy
- ENTS 246 Environmental and Agricultural Politics of America
- HIST 182 Survey-South African History
- HIST 220 African American History I
- HIST 226 U. S. Consumer Culture
- HIST 285 Topics in Historical Ethics
- POSC 120 Comparative Political Regimes
- POSC 201 National Policymaking
- POSC 385 Comparative Democratic Institutions
- SOAN 150 Who Cares and Who Gets Care, Women and Health
- SOAN 285 Ethics of Civic Engagement
- SOAN 395 Public Sociology
- SPAN 208 Coffee and News
- SPAN 326 Writers in Exile
- SPAN 356 Cuban Revolution-Literature
- THEA 185 The Speaking Voice
- THEA 352 African-American Theater

Concentrations: A concentration is an integrated interdisciplinary program which students may elect in addition to a major. Concentrations may strengthen and complement a major, by applying its methods to problems and issues that cut across the boundaries of academic disciplines, but a declared major in a particular department is not a prerequisite for acceptance into any concentration. Concentrations often bridge divisions necessarily created by a disciplinary focus and may promote communities of learning. By their nature, interdisciplinary endeavors of this sort are often problem-oriented, relating academic studies to the kinds of issues and opportunities one confronts outside the academy. Concentrations may also provide an opportunity for students to bring focus to the choice of electives and, in some cases, the fulfillment of other curricular requirements. Carleton offers fifteen concentrations.

Full descriptions of the concentrations are included in the alphabetical listing of departments and programs. Concentrations offered for the current academic year are:

- African/African American Studies
- Archaeology
- Biochemistry
- Cognitive Science
- Cross-Cultural Studies
- East Asian Studies
- Educational Studies
- European Studies
- French and Francophone Studies
- Latin American Studies
- Medieval and Renaissance Studies
- Neuroscience
- Political Economy
- South Asian Studies
- Women's and Gender Studies

Courses at St. Olaf College: By special arrangement a limited number of students may take courses at St. Olaf College which are not offered at Carleton. Graded course credit will be granted; enrollment requires the permission of the instructor and the registrar at each institution.

## Requirement Codes as indicated on each course description or in schedule of courses

Pertains to students matriculating Fall 2010 and thereafter:

- $\mathrm{AI}=$ Argument and Inquiry Seminar (6 credits required)
- $\quad \mathrm{ARP}=$ Arts Practice ( 6 credits required)
- $\mathrm{FSR}=$ Formal or Statistical Reasoning (6 credits required)
- $\mathrm{HI}=$ Humanistic Inquiry ( 6 credits required)
- IDS = Intercultural Domestic Studies (6 credits required)
- IS = International Studies (6 credits required)
- LA $=$ Literary/Artistic Analysis (6 credits required)
- LS $=$ Science with Lab ( 6 credits required)
- NE=No Exploration Credit
- $\mathrm{QRE}=$ Quantitative Reasoning Encounter (3 courses required)
- $\mathrm{SI}=$ Social Inquiry (6 credits required)
- WR1=Designates the Writing Component of an AI Seminar
- $\mathrm{WR} 2=$ Second Writing Rich Course (6 credits required)

Pertains to students who matriculated prior to Fall 2010 (see 2009-2010 Carleton College Catalog)

- $\mathrm{AL}=$ Arts and Literature ( 12 credits required)
- $\mathrm{HU}=$ Humanities ( 12 credits required)
- $\mathrm{SS}=$ Social Sciences (18 credits required)
- MS = Mathematics and Natural Sciences (18 credits required)
- $\mathrm{RAD}=$ Recognition and Affirmation of Difference
- $\mathrm{WR}=$ Writing Rich
- $\mathrm{ND}=$ No Distribution Credit


## Academic Departments

## AFRICAN/AFRICAN AMERICAN STUDIES (AFAM)

Director: Professor Harry McKinley Williams
Committee Members: Deborah Appleman, Elizabeth Ciner, Pamela Feldman-Savelsberg, Richard A. Keiser, Chérif Keïta, Stephen K. Kelly, Kofi Owusu, Melinda Russell

The program in African/African American Studies provides a cross-cultural and comparative framework for systematically studying the traditions and experiences of Africans in the New and Old Worlds. Students in this program are encouraged to develop their analytic, research and literary skills through a critical study of patterns of Western and African civilizations in their interwoven complexity. The program provides a forum for addressing topics such as cultural and artistic creativity, construction of self, marginality, responses to exclusion, and the conjunction of issues related to gender, class, race and ethnicity.

The African/African American Studies Committee is composed of faculty and administrative members. It acts as a focal point for the encouragement of African/African American studies at Carleton by actively urging departments and faculty members to offer courses in this field, by preparing each year a list of available courses and faculty resources, and by supporting the hiring of specialists in the field by various departments.

Numerous courses taught at Carleton have a bearing on African/African American Studies in addition to those offered by the program itself. Students majoring in African/African American Studies have been able to create programs, on an individual basis, out of the available Carleton offerings, independent study, and, in some cases, off-campus study. Students interested in majoring in the field should consult the Director of African/African American Studies before declaring their major.

## Requirements for a Major

I. Admission to the program will depend upon the acceptance, by the African/African

American Studies Committee, of a written proposal outlining the student's program of study.
II. Survey Courses ( 18 credits). Students must take three of the following courses:

AFAM 113 Introduction to African/African American Studies
ENGL 117 African American Literature
HIST 121 Rethinking the American Experience: American Social History, 1865-1945
HIST 183 History of Early West Africa
HIST 184 Colonial West Africa
HIST 220 African American History I (Not offered in 2010-2011)
MUSC 130 The History of Jazz
MUSC 245 Music of Africa
RELG 122 Introduction to Islam
III. Interdisciplinary Course ( 6 credits). Each student must complete one interdisciplinary course which, in part, specifically discusses African/African American Studies as a discipline:

AFAM 113 Introduction to African/African American Studies
ENGL 243 Text and Film (Not offered in 2010-2011)
IV. Distribution Courses ( 30 credits). Each student should take five courses that are essential to his or her major from the following groups:

Arts and Literature
ENGL 238 African Literature in English
ENGL 252 Caribbean Fiction (Not offered in 2010-2011)
ENGL 258 Contemporary American Playwrights of Color
ENGL 350 The Postcolonial Novel: Forms and Contexts
FREN 235 Francophone Literature of Africa and the Caribbean
THEA 242 Twentieth Century American Drama (Not offered in 2010-2011)
Humanities

HIST 220 African American History I (Not offered in 2010-2011)
HIST 221 African American History II
HIST 276 The African Diaspora in Latin America (Not offered in 2010-2011)
HIST 280 African in the Arab World
HIST 281 War in Modern Africa
HIST 322 Civil Rights and Black Power (Not offered in 2010-2011)
HIST 324 The Concord Intellectuals (Not offered in 2010-2011)
Social Sciences
EDUC 238 Multicultural Education: Race, Gender and Education
POSC 207 Urban Politics in a Global Era (Not offered in 2010-2011)
POSC 266 Urban Political Economy
POSC 306 How Race Matters in American Politics*
POSC 366 Urban Political Economy*
POSC 367 Suburbanization in America* (Not offered in 2010-2011)
PSYC 384 Psychology of Prejudice
SOAN 256 Ethnography of Africa (Not offered in 2010-2011)
At least one course must be chosen from each of the three groups, and at least two of the total of five courses must be at the 300-level.
V. Senior Seminar in African/African American Studies (6 credits)

HIST 395 Transnational Black History Since 1945
VI. Comprehensive Exercise ( 6 credits). Each student should have a faculty adviser in his or her area of focus who will direct the comprehensive and integrative project along with the program director. The research project will culminate in an oral examination in defense of the completed integrative essay.

Completion of the major stipulates, then, a minimum of 66 credits: three survey courses, one interdisciplinary course, five distribution courses, senior seminar, and the comprehensive exercise.

Students are urged to pursue off-campus study in a community setting in the United States, Africa or the Caribbean. The Office of Off-Campus Studies provides information about such opportunities.

## African/African American Studies Courses

113. Introduction to African/African American Studies In addition to Karenga's "Introduction to Black Studies," we will read selected works of fiction and non-fiction by African and African American thinkers and writers like Achebe, Angelou, Anthony Appiah, Baldwin, Du Bois, Equiano, and Obama with a view to discussing some of the seminal ideas that inform African/African American studies. 6 credits, AL, RAD; HI, IDS, Fall-K. Owusu
114. Integrative Exercise 6 credits, $S / N C$, $N D$, Winter—Staff

## Other Courses Pertinent to African/African American Studies

DANC 301 Contemporary Styles and Techniques: African Dance
ECON 240 Microeconomics of Development
EDUC 353 Schooling and Opportunity in American Society
HIST 120 Rethinking the American Experience: American Social History, 1607-1865
HIST 360 Muslims and Modernity (Not offered in 2010-2011)
HIST 381 History, Memory and the Atlantic World: Ghana and the United States
MUSC 131 The Blues From the Delta to Chicago
MUSC 330 Jazz History Seminar (Not offered in 2010-2011)
PHIL 110 Personal Identity

POSC 122 Politics in America: Liberty and Equality
POSC 170 International Relations and World Politics
POSC 219 Protest, Power \& Grassroots Organizing: American Social Movements
POSC 275 Identity Politics in America: Ethnicity, Gender, Religion
POSC 319 Protest, Power and Grassroots Organizing: American Social Movements
POSC 355 Identity, Culture and Rights*
PSYC 224 Psychology of Gender
PSYC 248 Cross-Cultural Psychology
RELG 227 Liberation Theologies (Not offered in 2010-2011)
RELG 246 Religion and the Black Freedom Struggle
RELG 330 Radical Pacifism
SOAN 220 Class, Power, and Inequality in America
SOAN 226 Anthropology of Gender (Not offered in 2010-2011)
WGST 110 Introduction to Women's and Gender Studies

## AFRICAN/AFRICAN AMERICAN STUDIES CONCENTRATION

## Director: Professor Harry McKinley Williams

In this concentration, the study of the traditions and experiences of Africans in the New and Old Worlds is rooted both in the mastery of a social science, arts and literature, or humanities discipline, and in interdisciplinary course work. The concentration will emphasize international and cross-cultural perspectives.

## Requirements for the Concentration

The African/African American Studies Concentration requires seven courses as follows:
Two survey courses
One interdisciplinary course
Three distribution courses that are deemed essential to the concentration chosen from at least two of the following groups: arts and literature, humanities, social sciences. Two of the three courses must be at the 300-level.
Senior Seminar in African/African American Studies
For a list of relevant courses, see the African/African American Studies major.

## AMERICAN STUDIES (AMST)

Director: Professor Melinda Russell
Professor: Elizabeth McKinsey
Associate Professor: Adriana Estill
Andersen Post-Doctoral Fellow: Audrey Sophia Russek
Committee Members: Sharon Akimoto, Barbara Allen, Deborah Appleman, Peter Balaam, Laurel Bradley, Lawrence E. Burnett, Clifford E. Clark, Jr., Carol Donelan, Gregory G. Hewett, Anna Rachel Igra, Baird E. Jarman, Mark T. Kanazawa, Richard Keiser, Stephen K. Kelly, Michael J. Kowalewski, Jerome M. Levi, Michael McNally, Beverly Nagel, Annette Nierobisz, Kofi Owusu, Ronald W. Rodman, Melinda Russell, John F. Schott, Kimberly K. Smith, Ruth Weiner, David Wiles, Harry McKinley Williams, Carolyn Wong, Serena R. Zabin

This program is designed to encourage and support the interdisciplinary study of American culture. It draws upon the expertise of faculty in various disciplines and strives to understand the
institutions, values, and beliefs that have shaped the experiences of U.S. residents. Recognizing the diverse and pluralistic nature of our society, the American Studies program enables the student to construct an interdisciplinary major around topics of the student's own choice such as urban studies, ethnicity, media, religion, gender roles, environmental thought or some other aspect of the American experience. The program supports interdisciplinary courses taught by Carleton faculty and it brings to campus nationally known visiting artists and scholars under the auspices of the Fred C. Andersen Foundation.

## Requirements for a Major

American Studies is an interdisciplinary major which a student constructs from offerings in two or more departments of instruction. To major in American Studies students must fill out an application form that can be obtained online at the American Studies Web site. The form asks students to specify the general topic or focus of the major and the disciplines which seem most appropriate for study of that topic.

Majors must complete 69 credits ( 66 credits, eleven courses, for the class of 2011 only) in the following general areas:
I. Core Courses: Each student must complete all four of these:

AMST 115 Introduction to American Studies
AMST 345 Theory and Practice of American Studies
AMST 396 Junior Research Seminar
AMST 399 Senior Seminar in American Studies (optional for the class of 2011 only)
AMST 400 Colloquium and Integrative Exercise in American Studies (3 credits, to be taken in winter term of the senior year, along with AMST 399. Seniors in the class of 2011 only will take 6 credits of 400, and are recommended but not required to take 399)
American Studies 115 is a prerequisite for 345 and 396.
II. Survey Courses: Students must take three survey courses. Two of these three survey courses should be part of a two-term sequence in one department. The third survey course should be a one-term course in a different department. Because the entire range of these survey courses is not offered every year, students should consult the online catalog and plan accordingly.

Two-term survey courses:
HIST 120 Rethinking the American Experience: American Social History, 1607-1865
HIST 121 Rethinking the American Experience: American Social History, 1865-1945
HIST 220 African American History I (Not offered in 2010-2011)
HIST 221 African American History II
HIST 222 U.S. Women's History to 1877
HIST 223 U.S. Women's History Since 1877
POSC 271 Constitutional Law I (Not offered in 2010-2011)
POSC 272 Constitutional Law II (Not offered in 2010-2011)
One-term survey courses:
ARTH 160 American Art to 1940
CAMS 215 American Film History (Not offered in 2010-2011)
ECON 232 American Economic History: A Cliometric Approach (Not offered in 2010-2011)
ENGL 212 Nineteenth-Century American Literature
POSC 122 Politics in America: Liberty and Equality
RELG 140 Religion and American Culture (Not offered in 2010-2011)
III. Topical Courses: Each student must take four courses that deal with elements of the American experience that he or she has determined are central to a particular focus within the major. Courses that will fulfill this requirement are listed under three groups. No more than one of these courses may be a 100-level course. (Survey courses above and beyond those used to satisfy the required one-term and two-term sequences may count as a Topical Course.) No more than two Topical Courses
may be from the same group. Students must take courses from at least two groups. In order that majors acquire the research skills necessary to complete the major, one of these four courses must be a 300level course.
IV. Integrative Exercise: A senior may choose:

AMST 400 Colloquium and Integrative Exercise in American Studies
a. Essay or Project Option: a 35-40 page essay on an approved topic; or an approved project (e.g., a critical documentary, radio narrative, web design project, performance piece, or service learning project) accompanied by a 15-20 page essay. Open only to students who receive approval of a project prospectus. Students hoping to write an essay are advised to take a methods course in one of the social science departments or SOAN 242 Qualitative Thinking.
b. Examination Option: A written examination given early in spring term.

## American Studies Courses

115. Introduction to American Studies: The Immigrant Experience Is America truly a nation of immigrants? What role has immigration played in the construction of an American identity? This course is a team-taught, comparative study of the experience of migrants and immigrants to America and other countries. We will use texts from history, literature, film, psychology, and other disciplines to help us investigate the following topics: the causes of emigration; acculturation and assimilation; changes in family structure and gender roles; discrimination; and ongoing debates about immigration policy in relation to national ideals and principles. 6 credits, $H U, W R, R A D$; HI, WR2, IDS, Fall-S. Akimoto, $\boldsymbol{N}$. Cho
116. Introduction to American Studies: Placing Identities This course will examine the different spaces that inform the production of U.S. identities. We will think about the ways the construction of neighborhoods (urban or suburban) affects our sense of place, ethnicity, and community; we'll consider the impact that border geographies, whether physical or cultural, have on national imaginings; we shall look at contemporary cultural expressions of small town vs. big city life and consider what they feature as particular and unique about Americanness. 6 credits, $A L, W R$, $H I, W R 2, I D S$, Spring-E. McKinsey, M. McNally
117. Introduction to U.S. Latino/a Studies This course will survey the field of Latino/a Studies, juxtaposing it to Chicano, Caribbean and Latin American Studies in order to trace the historical, methodological, and paradigmatic conflicts that led to its institutionalization. How does the lens of U.S. Latino/a Studies help us to examine heterogeneous and changing Latino communities? How are the "Latin Boom" of the entertainment industry and the recent demographic shift that places Latinos as the "majority minority" related? A selection of texts from a variety of disciplines (including history, the social sciences, literature, music, and the visual arts) will inform our discussions. 6 credits, $N D, W R$, RAD; SI, WR2, IDS, QRE, Winter-A. Estill
118. Latinas in Hollywood Latinas have a long history in Hollywood, from silent films to J. Lo. We will examine how the presence of Latinas onscreen reflects the pressures and needs of different eras. We will think about the pressure to "pass" as white and compare that to the insistent stereotypes about Latinas circulated through film. Throughout the course we'll be attentive to the relationship between film and other media, between the U.S. and other countries. What are the linguistic, social, and economic conditions that enable a "cross-over" artist? And how do Latino/a literatures, documentaries, and performances respond to the film and television industries? Prerequisite: Spanish reading fluency a plus, but not required. 6 credits, $A L, W R, R A D ; L A, W R 2, I D S$, Not offered in 2010-2011
119. Beyond the Border: Latinos Across America The metaphor of the United States-Mexico border often determines our understanding of Latinos' place in the United States. This class studies Latinidad in other spaces: New York, the suburban Southwest, the rural Midwest, and the agricultural Southeast. We
will use several disciplines--literary studies, history, cultural studies (music, film, and dance), and sociology--to investigate the following questions: How do immigrant Latinos change the communities they move into? How do these communities change Latinos? How are place and identity transformed? How do the mass media influence how Americans think about where and how Latinos belong in the United States? 6 credits, AL, WR, RAD; HI, WR2, IDS, QRE, Not offered in 2010-2011
120. The American Sublime: Landscape, Character \& National Destiny in Nineteenth Century America Focusing on the early nineteenth century struggle to create an American nation and a national culture, we will look at the ways Americans adopted and adapted European ideas, particularly the aesthetic idea of the Sublime, in their attempt to come to terms with the conquest of the new land and its native inhabitants and with the nature of their national enterprise. Writers Irving, Cooper, Emerson, Thoreau, Hawthorne, Melville, Whitman, and Dickinson and painters Cole, Bierstadt, Church, Kensett, and Lane will be included. Major themes will include attitudes towards landscape and settlement, a distinctively American character, the nature and utility of art, and ideas of American empire. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
121. Native American Literature Study and discussion of Native American literature from its graphic and oral roots to contemporary memoir, fiction, and poetry. Authors read will include Black Elk/John Neihardt, Charles Eastman, James Welch, N. Scott Momaday, Louise Erdrich, Joy Harjo, Susan Power, LeAnne Howe, Leslie Marmon Silko, David Treuer, and Sherman Alexie. Topics to be discussed will include the importance of place, nature, and spiritual life; diverse representations of historical events; complexities of individual and tribal identity; and differences between fictive literature and ethnography. The course will also critique the depiction of Native Americans by Euro-Americans in popular media. 6 credits, AL; NE, Not offered in 2010-2011
122. Introduction to Asian American Studies This course is designed as an interdisciplinary study of Asian American identities and cultures. We will address the diversity and fluidity of Asian American experiences through an examination of history, social sciences, literature, and film. Students of all majors and backgrounds are welcome to enroll. 6 credits, ND, WR, RAD; HI, WR2, IDS, Not offered in 2010-2011
123. The Midwest and the American Imagination The history of American culture has always been shaped by a dialectic between the local and the universal, the regional and the national. The particular geography and history of the Midwest (the prairie, the plains, the old Northwest, Native Americans and white adventurers, settlers and immigrants) have shaped its livelihoods, its identities, its meanings. Focusing on the late nineteenth and early twentieth centuries, this course will explore literature, art history, and the social and cultural history of the Midwest. 6 credits, AL, WR; HI, WR2, Not offered in 2010-2011
124. Getting to Know Buffalo Bill Cody An iconic figure of the American West, William F. (Buffalo Bill) Cody was probably the most famous American in the world at the end of the nineteenth century. He is less well-known today. Using my new book on Buffalo Bill as a point of entry, I will conduct a kind of tour of Buffalo Bill's life and the things written about it. Class readings will range from nineteenth-century dime novels to twenty-first century historiography, with detours through Hollywood and Broadway. 6 credits, HU; NE, Not offered in 2010-2011
125. Extraordinary Bodies in American Culture What makes a body extraordinary? How have humans modified their bodies to challenge social expectations or turn "ordinary" bodies into extraordinary ones? How have science and technology helped make the spectacular body more "normal?" What do these modifications reveal about social concepts of masculinity and femininity, normalcy and deviance, power and agency? This course examines intersections of engineering, design, performance, and the human body in American culture. We will engage with complex social issues, including freak shows, cosmetic surgery, bodybuilding, prostheses, and tattoos to understand
technology's role in reinforcing and challenging ideas of bodily norms in the United States. 6 credits, HU, WR, RAD; HI, WR2, IDS, Fall-A. Russek
126. Ethnic Foodways in the United States This course explores the creation, exchange, and consumption of ethnic foodways in the United States. In particular, we will look at food as a cultural artifact that is intricately tied to individual and group identification with ancestry and traditions. Our interdisciplinary study of food and culture will consider the influence of factors such as geography, home and community cooking, business and industry, and globalization in the formation and evolution of ethnic food in the United States. What is ethnicity? Is all American food also ethnic food? And is there such a thing as an American cuisine? Includes community-based research component. 6 credits, HU, WR, RAD; HI, WR2, IDS, Spring-A. Russek
127. Hip-Hop Media: Commercialization, Community and U.S. Culture This course will examine mainstream media representations of urban America, specifically framed as the "hip-hop generation," through critique of Hollywood films, mainstream news outlets, television programs, and media conglomerates that profit from these images. We will read these narratives against the hip-hop generation's framings of themselves as a community, considering modes of self-articulation in and beyond various media outlets. We will listen to songs, watch videos, travel the Internet, and trace "communities" on Myspace. By exploring hip-hop's media constructions we can consider the framings of gender, race, class, and sexuality of young people of color in the United States 6 credits, ND, RAD; NE, Not offered in 2010-2011
128. Utopia, Dystopia, and Myopia: The Suburbs in American Fiction This course peers through the picture window of suburban life in the United States. Our primary text will be film. To what extent do fictional accounts reflect the scholarly concerns and analytical conclusions of Historians and Social Scientists? What themes are common in film and/or literature but get little attention from scholars? Students will be obligated to view films on their own if designated show times are inconvenient. Some films may be R-rated. Prerequisite: American Studies 115 or sophomore standing. 6 credits, SS, WR; SI, WR2, Not offered in 2010-2011
129. Theory and Practice of American Studies Introduction to some of the animating debates within American Studies from the 1930s to the present. We will study select themes, theories, and methodologies in the writings of a number of scholars in the field and try to understand 1) the often highly contested nature of debates about how best to study American culture; and 2) how various theories and forms of analysis in American Studies have evolved and transformed themselves over the last seventy years. The course is not designed to be a fine-grained institutional history of American Studies, but a vigorous exploration of some of the central questions of interpretation in the field. Normally taken by majors in their junior year. Prerequisite: American Studies 115.6 credits, ND; NE, IDS, Winter-A. Russek
130. Junior Research Seminar: Music of the 1970s Frequently derided as a nadir of musical culture, and forever tainted by disco, the 1970s were a period of extraordinary musical creativity and change. In additional to the flowering of soft rock, funk, heavy metal, and punk, the era also saw debates over authenticity in country music, experimentation with minimalism, jazz, and technology in classical music, and the beginnings of a "world music" market as reggae made its way onto U.S. charts. We'll explore this decade of music through listening, footage, historic documents, and the scholarship focusing on its stylistic innovations and critical and audience reception. Prerequisite: American Studies 345 or permission of instructor. 6 credits, ND, WR; NE, WR2, IDS, Spring-M. Russell
131. Junior Research Seminar: American Empire This class will attempt to define the "American Empire" from its origins to the present. Treating the idea of empire both geographically and politically, we will examine how economic, social, political, and/or cultural sites of power come together to create an empire. This course will pay special attention to the roles that race, gender, and ethnicity play in the
creation of an American empire. Using the methods of American studies and other disciplines, we will occasionally step back to ask how the field of American Studies itself contributes to our understanding of the American empire. Prerequisite: American Studies 345. 6 credits, ND, WR; NE, WR2, IDS, Not offered in 2010-2011
132. Senior Seminar in American Studies This seminar focuses on advanced skills in American Studies research, critical reading, writing, and presentation. Engagement with one scholarly talk, keyed to the current year's comps exam theme, will be part of the course. Through a combination of class discussion, small group work and presentations, and one-on-one interactions with the professor, majors learn the process of crafting and supporting independent interdisciplinary arguments, no matter which option for Comps they are pursuing. Students also will learn effective strategies for peer review and oral presentation. Concurrent enrollment in AMST 400 is required. Prerequisite: American Studies 396.6 credits, ND; NE, Winter-E. McKinsey
133. Integrative Exercise - Exam The colloquium will meet as a research seminar, providing a structured environment for seniors working on approved essays or projects in American Studies. It will build upon the research experience of the junior seminar, and prepare students for the independent production of theses or performances to satisfy the college "comps" requirement. Students will be evaluated for this course upon completion of the senior integrative exercise. They will be required to give a public presentation on their research during the spring term. 6 credits, $S / N C$, $N D$; NE, Winter-

## M. Russell

400. Integrative Exercise - Essay/Project Students read selected works and view films in the field of American Studies and in a narrow topic area designated by the program. For integrative exercise examination students only. 6 credits, $S / N C$, ND; NE, Winter-M. Russell

## Topical Courses:

## Group I

AMST 226 Latinas in Hollywood (Not offered in 2010-2011)
AMST 230 The American Sublime: Landscape, Character \& National Destiny in Nineteenth Century America (Not offered in 2010-2011)
AMST 238 Native American Literature (Not offered in 2010-2011)
AMST 240 The Midwest and the American Imagination (Not offered in 2010-2011)
AMST 261 Hip-Hop Media: Commercialization, Community and U.S. Culture (Not offered in 2010-2011)
ARTH 160 American Art to 1940
ARTH 222 History of Photography
ARTH 240 Art Since 1945
ARTH 245 Modern Architecture (Not offered in 2010-2011)
ARTH 247 Architecture Since 1950 (Not offered in 2010-2011)
ARTH 310 The Architecture of Frank Lloyd Wright (Not offered in 2010-2011)
CAMS 215 American Film History (Not offered in 2010-2011)
CAMS 225 Film Noir: The Dark Side of the American Dream
CAMS 241 History of American Broadcasting: From Wireless to the Web (Not offered in 20102011)

ENGL 117 African American Literature
ENGL 119 Introduction to U.S. Latino/a Literature (Not offered in 2010-2011)
ENGL 215 Modern American Literature
ENGL 227 Borderlands: Places and People (Not offered in 2010-2011)
ENGL 234 Literature of the American South
ENGL 235 Asian American Literature (Not offered in 2010-2011)

ENGL 236 American Nature Writing (Not offered in 2010-2011)
ENGL 239 American Best-Sellers (Not offered in 2010-2011)
ENGL 247 The American West
ENGL 248 Visions of California
ENGL 258 Contemporary American Playwrights of Color
ENGL 272 Truth vs. Power: A Journey in Journalism (Not offered in 2010-2011)
ENGL 331 American Transcendentalism (Not offered in 2010-2011)
ENGL 332 Studies in American Literature: Faulkner, Hemingway, and Fitzgerald (Not offered in 2010-2011)
ENGL 336 Romance to Novel: Poe, Hawthorne, James (Not offered in 2010-2011)
MUSC 115 Music and Film
MUSC 130 The History of Jazz
MUSC 131 The Blues From the Delta to Chicago
MUSC 137 Spiritual Hymns and Gospel Music: Aspects of African-American Music Traditions (Not offered in 2010-2011)
MUSC 247 The U.S. Folk Music Revival
MUSC 330 Jazz History Seminar (Not offered in 2010-2011)
THEA 242 Twentieth Century American Drama (Not offered in 2010-2011)
THEA 252 African-American Theater (Not offered in 2010-2011)
THEA 352 African-American Theater (Not offered in 2010-2011)

## Group II

AMST 127 Introduction to U.S. Latino/a Studies
AMST 250 Getting to Know Buffalo Bill Cody (Not offered in 2010-2011)
AMST 252 Ethnic Foodways in the United States
CAMS 310 Moviegoing and Film Exhibition in America (Not offered in 2010-2011)
HIST 120 Rethinking the American Experience: American Social History, 1607-1865
HIST 121 Rethinking the American Experience: American Social History, 1865-1945
HIST 195 American Environmental History
HIST 200 The Zen of Asian and Western Woodworking (Not offered in 2010-2011)
HIST 212 The Era of the American Revolution
HIST 213 The Age of Jefferson (Not offered in 2010-2011)
HIST 217 From Ragtime to Football: U.S. History in the 1890s (Not offered in 2010-2011)
HIST 220 African American History I (Not offered in 2010-2011)
HIST 221 African American History II
HIST 222 U.S. Women's History to 1877
HIST 223 U.S. Women's History Since 1877
HIST 226 U.S. Consumer Culture
HIST 227 The American West (Not offered in 2010-2011)
HIST 228 American Indian History (Not offered in 2010-2011)
HIST 279 American Intellectual History (Not offered in 2010-2011)
HIST 306 Topics in Environmental History: American Wilderness
HIST 322 Civil Rights and Black Power (Not offered in 2010-2011)
HIST 324 The Concord Intellectuals (Not offered in 2010-2011)
RELG 124 Jews and the American Experience (Not offered in 2010-2011)
RELG 130 Native American Religions
RELG 140 Religion and American Culture (Not offered in 2010-2011)
RELG 243 Native American Religious Freedom
RELG 249 Religion and American Public Life (Not offered in 2010-2011)
RELG 322 Gender and God-Talk: Christian Feminist Theologies (Not offered in 2010-2011)
RELG 344 Lived Religion in America (Not offered in 2010-2011)

## Group III

AMST 267 Utopia, Dystopia, and Myopia: The Suburbs in American Fiction (Not offered in 20102011)

ECON 232 American Economic History: A Cliometric Approach (Not offered in 2010-2011)
ECON 262 The Economics of Sports (Not offered in 2010-2011)
ECON 271 Economics of Natural Resources and the Environment
ECON 273 Water and Western Economic Development
ECON 275 Law and Economics
EDUC 225 Issues in Urban Education
EDUC 238 Multicultural Education: Race, Gender and Education
EDUC 242 Developing Education Policy for Access \& Equity (Not offered in 2010-2011)
EDUC 340 Race, Immigration and Urban Schools (Not offered in 2010-2011)
EDUC 344 Teenage Wasteland: Adolescence and the American High School (Not offered in 20102011)

EDUC 353 Schooling and Opportunity in American Society
EDUC 365 Democracy, Diversity, and Education
POSC 122 Politics in America: Liberty and Equality
POSC 201 National Policymaking
POSC 204 Media and Electoral Politics: 2010 United States Election
POSC 205 Issues in American Democracy
POSC 206 The American Courts
POSC 207 Urban Politics in a Global Era (Not offered in 2010-2011)
POSC 213 Labor Politics in a Global Age (Not offered in 2010-2011)
POSC 216 The Initiative, Referendum and Public Policy (Not offered in 2010-2011)
POSC 219 Protest, Power \& Grassroots Organizing: American Social Movements
POSC 220 Politics and Political History in Film
POSC 231 American Foreign Policy
POSC 271 Constitutional Law I (Not offered in 2010-2011)
POSC 272 Constitutional Law II (Not offered in 2010-2011)
POSC 273 Citizen and Immigration Politics
POSC 275 Identity Politics in America: Ethnicity, Gender, Religion
POSC 305 Issues in American Democracy*
POSC 306 How Race Matters in American Politics*
POSC 308 Poverty and Public Policy* (Not offered in 2010-2011)
POSC 309 The American Presidency*
POSC 311 Topics in Constitutional Law*
POSC 313 Labor Politics in a Global Age* (Not offered in 2010-2011)
POSC 316 The Initiative, Referendum and Public Policy* (Not offered in 2010-2011)
POSC 319 Protest, Power and Grassroots Organizing: American Social Movements
POSC 329 Vietnam, Iraq, and American Policy* (Not offered in 2010-2011)
POSC 346 Spies, Rogues and Statesmen: Intelligence and the Formation of Foreign Policy*
POSC 352 Political Theory of Alexis de Tocqueville* (Not offered in 2010-2011)
POSC 355 Identity, Culture and Rights*
POSC 367 Suburbanization in America* (Not offered in 2010-2011)
PSYC 384 Psychology of Prejudice
SOAN 202 Girls Gone Bad: Women, Crime, and Criminal Justice
SOAN 220 Class, Power, and Inequality in America
SOAN 221 Law and Society
SOAN 259 Comparative Issues in Native North America
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2010-2011)

## ARABIC

See Middle Eastern Languages.

## ARCHAEOLOGY CONCENTRATION (ARCN)

Directors: Professors Nancy C. Wilkie and Mary Savina

Archaeology is an interdisciplinary study of material artifacts in their cultural and environmental context. The introductory and core courses of the concentration are designed to give students a methodological introduction to these three elements of artifacts, culture, and environment. In the supporting course projects, students take an interdisciplinary view, analyzing and interpreting material remains in a variety of ways. The range of supporting courses provides students with the flexibility to plan their own programs.

Students from any major may participate in the Archaeology Concentration. Students interested in the concentration are encouraged to consult with the coordinators early in the sophomore year in order to plan ahead and retain as much freedom of choice as possible in meeting the requirements of the program.

## Requirements for the Concentration

Eight courses are required for the concentration, including two introductory courses, two core courses, projects in three supporting courses, and one capstone seminar.

## Introductory Courses (2):

GEOL 110: Introduction to Geology or
GEOL 120: Introduction to Environmental Geology and
SOAN 110: Introduction to Anthropology

## Core Courses (2):

GEOL 210: Geomorphology or
GEOL 258: Geology of Soils (Not offered in 2010-2011) and
ARCN 246: Archaeological Methodology

## Projects in Supporting Courses (3):

A minimum of three supporting courses must be selected from among the college's offerings (other than the courses required for the concentration listed above). At least one of these courses must help students become familiar with a culture other than their own through work in history, sociology/anthropology, Latin American Studies, Asian Studies or any other program in which the material aspects of a given culture can be examined. In the three supporting courses, as part of the regular course requirements (or as a separate independent study, growing out of the course), students will write a paper or complete a project involving interpretation of archaeological materials. The topic of the paper should be negotiated by the student and the course instructor. If it is not possible to complete a project that uses archaeological data while taking the supporting course, the student must enroll in a separate two to six credit independent study for the purpose of writing such a paper. Students must fulfill normal prerequisites for the supporting courses before enrolling.

The concentration coordinators can advise students about which courses may fulfill these requirements. These courses are in many college departments and include courses conducted by visiting professors. Students are encouraged to consult with the concentration coordinators for suggestions.

The concentration coordinators are available to help students and instructors of supporting courses. Students are responsible for giving a copy of each completed paper/project to the concentration
coordinators who will decide if the project is acceptable for the concentration.
Capstone Seminar (1):
ARCN 395 Archaeology Seminar (Not offered in 2010-2011)

## Field Experience

Concentrators are strongly urged to gain practical field experience in archaeology over and above what is available through the capstone seminar. Field projects and off-campus programs with an archaeological component offer opportunities for such practical experience. For example, the ACM Costa Rica program offers field work in archaeology. The concentration coordinators can help arrange internships for concentrators with archaeological projects and laboratories.

## Archaeology Courses

246. Archaeological Methodology A study of the methods currently employed in the retrieval, recording and interpretation of archaeological evidence. Among the topics to be covered are regional surveys, selection of sites for excavation, methods of excavation and recording, conservation of artifacts, scientific analyses of archaeological material and data, and the final publication of results. No prerequisite. 6 credits, SS; LS, Winter-N. Wilkie
247. Archaeology Capstone Seminar The course will focus on a wide range of contemporary issues in archaeology, including archaeological ethics, cultural property legislation, illicit collecting, looting of archaeological sites, and the role of nationalism in archaeology. The course serves as the capstone seminar for the Archaeology Concentration. Enrollment is open to non-concentrators with permission of the instructors. 6 credits, SS; SI, Not offered in 2010-2011

## ART AND ART HISTORY

Associate Chairs: Associate Professor Baird Jarman, Associate Professor Linda Rossi
Professors: Fred Hagstrom, Alison Kettering, Kathleen M. Ryor
Associate Professors: Baird E. Jarman, David Lefkowitz, Stephen Mohring, Linda Rossi
Assistant Professors: Kelly Connole, Ross K. Elfline
Visiting Assistant Professor: Jeff Rathermel
Senior Lecturer: Daniel P. Bruggeman
Carleton combines in a single department the creative aspects of art making and the study of art as an historical discipline. The Studio Art program helps students develop their skills in a variety of arts media. It also gives them a critical understanding of the function and process of art that fits well with the goals of the college's liberal arts orientation. The Art History program introduces students to the intrinsic qualities of artistic images and artifacts. Equally important, it considers the conditions of their production and viewing, their functions and meanings, and the roles they play in recording and shaping people, perceptions, events, and cultures.

Both programs serve potential majors, including students who go on to art-related careers, as well as students who take courses as part of their broad liberal arts education.

## Requirements for a Major

Art History: 72 credits including: the seminar for art history majors (Art History 298); the integrative exercise (Art History 400); two Studio Art courses; and 48 elective credits in Art History, normally including Art History 101 and 102, as well as at least one course in non-Western art history, one course in art history of the western tradition before 1800, one course in art history of the western tradition after 1800, and one 300-level seminar. Art History majors are encouraged to take advantage of
off-campus study programs. No more than two art history courses taken outside of the department can be counted toward the major. Occasionally one course in a related department such as Cinema and Media Studies may count as an elective toward the major.

Studio Art: 72 credits including: two courses from Studio Art 110, 113, 210, 212, 238, 240, 260, or 274; two courses from 122, 230, 232, 251 or 300 level 3D (322, 327, 330, 351); Studio Art 298; a 300 level studio art course; two electives; the integrative exercise; 18 credits in Art History with at least six of the credits in courses which concentrate in art of the western tradition before 1800, six credits in courses which concentrate in contemporary art post 1945, and six elective credits. Potential majors should enroll in Drawing or Sculpture their first year. One of the following Cinema and Media Studies courses can count toward one elective credit within the major: Cinema and Media Studies 111, 270, 271, 281 and 282. One of the following Cinema and Media Studies courses can count towards the Art History requirement within the major: Cinema and Media Studies 210, 211, or 228.

## Art History Courses (ARTH)

100. The Artist: From Craftsman to Star In Western culture, the artist is represented as artisan, individualist, creator, entrepreneur, inventor, bohemian, genius, and celebrity. In this course, the artist's ever-changing status, role, and identity will be explored through self-portraiture, biography, gender politics, critical theory, museum practice, studio training and artistic technique. Michelangelo, Caravaggio, Artemisia Gentileschi, Rembrandt, Vermeer, Van Gogh, Picasso, and Pollock number among the artists considered. The course will introduce art historical principles and methods, but its contexts will extend beyond traditional art history to include socio-economic, scientific, literary, and film perspectives. 6 credits, AI, WR1, Fall—A. Kettering
101. Introduction to Art History I An introduction to the art and architecture of various geographical areas around the world from antiquity through the "Middle Ages." The course will provide foundational skills (tools of analysis and interpretation) as well as general, historical understanding. It will focus on a select number of major developments in a range of media and cultures, emphasizing the way that works of art function both as aesthetic and material objects and as cultural artifacts and forces. Issues include, for example, sacred spaces, images of the gods, imperial portraiture, and domestic decoration. 6 credits, AL, WR; LA, WR2, IS, Fall-A. Kettering, K. Ryor
102. Introduction to Art History II An introduction to the art and architecture of various geographical areas around the world from the fifteenth century through the present. The course will provide foundational skills (tools of analysis and interpretation) as well as general, historical understanding. It will focus on a select number of major developments in a range of media and cultures, emphasizing the way that works of art function both as aesthetic and material objects and as cultural artifacts and forces. Issues include, for example, humanist and Reformation redefinitions of art in the Italian and Northern Renaissance, realism, modernity and tradition, the tension between self-expression and the art market, and the use of art for political purposes. 6 credits, $A L$, WR, RAD; LA, WR2, IS, Winter-R. Elfine, K. Ryor
103. African Art and Culture This course will survey the art and architecture of African peoples from prehistory to the present. Focusing on significant case studies in various mediums (including sculpture, painting, architecture, masquerades and body arts), this course will consider the social, cultural, aesthetic and political contexts in which artistic practices developed both on the African continent and beyond. Major themes will include the use of art for status production, the use of aesthetic objects in social rituals and how the history of African and African diaspora art has been written and institutionally framed. 6 credits, $A L, R A D$; LA, IS, Not offered in 2010-2011
104. Architecture Across Cultures This course will investigate the history of world architecture through selected examples organized by architectural type. We will consider a variety of buildings types
from many different periods of history and discuss the formal, spatial and structural features of the buildings. We will pay close attention to the religious, political, social and cultural circumstances surrounding the design of these structures. We will examine the architectural variety found in various cultures around the globe and we will also search for any shared traits between cultures in their efforts to meet a range of religious, political and social needs. 6 credits, AL; LA, IS, Not offered in 2010-2011
105. Islamic Art and Architecture This course surveys the art and architecture of societies where Muslims were dominant or where they formed significant minorities from the seventh through the twentieth centuries. It examines the form and function of architecture and works of art as well as the social, historical and cultural contexts, patterns of use, and evolving meanings attributed to art by the users. The course follows a chronological order, where selected visual materials are treated along chosen themes. Themes include the creation of a distinctive visual culture in the emerging Islamic polity; cultural interconnections along trade and pilgrimage routes; and westernization and modernization. 6 credits, AL; LA, IS, Not offered in 2010-2011
106. American Art to 1940 Concentration on painting of the colonial period (especially portraiture) and nineteenth century (especially landscape and scenes of everyday life) with an introduction to the modernism of the early twentieth century. The course will include analysis of the ways art shapes and reflects cultural attitudes such as those concerning race and gender. 6 credits, $A L, R A D ; L A, I D S$, Spring-B. Jarman
107. Buddhist Art The Buddhist religion has been a central part of Asian cultures and societies since the third century BC. This course will trace the development of Buddhist art and architecture from its beginnings in India through its migration across the Asian continent. Attention will be paid to both the Mahayana and Theravada traditions in Central East, South, and South-East Asia. Special emphasis will be placed on the relationship between different doctrines, for example, Tantrism or Zen and the development of form and style. 6 credits, AL, RAD; LA, IS, Not offered in 2010-2011
108. Japanese Art and Culture This course will survey art and architecture in Japan from its prehistoric beginnings until the early twentieth century, and explore the relationship between indigenous art forms and the foreign (Korean, Chinese, European) concepts, art forms and techniques that influenced Japanese culture, as well as the social political and religious contexts for artistic production. 6 credits, AL, RAD; LA, IS, Not offered in 2010-2011
109. Chinese Art and Culture This course will survey art and architecture in China from its prehistoric beginnings to the end of the nineteenth century. It will examine various types of visual art forms within their social, political and cultural contexts. Major themes that will also be explored include: the role of ritual in the production and use of art, the relationship between the court and secular elite and art, and theories about creativity and expression. 6 credits, AL; LA, IS, Fall-K. Ryor
110. Printmaking: The First Media Revolution The course explores printmaking's effects on Western ways of understanding the world; until photography prints were the only exactly repeatable pictorial statements their audiences knew. It examines how prints functioned in their cultures (their originality, production, marketing, collecting). Woodcut, engraving, etching, aquatint, and lithography, c.14001930, are studied through such artists as Dürer, Rembrandt, Goya, Daumier, Toulouse-Lautrec, Cassatt, and Kollwitz. The class works extensively with prints in the collections of the Minneapolis Institute of Arts (three field trips) and the Carleton Art Gallery. Students taking the course for 4 credits write one fewer paper and a shortened final exam. 4 or 6 credits, $A L$, WR; LA, WR2, Not offered in 2010-2011
111. Modern Art: 1890-1945 This course explores developments in the visual arts, architecture, and theory in Europe and America between 1890 and 1945. The major Modernist artists and movements that sought to revolutionize vision, culture, and experience, from Symbolism to Surrealism, will be considered. The impact of World War I, the Great Depression, and the rise of fascism will be examined as well for their devastation of the Modernist dream of social-cultural renewal. Lectures will be
integrated with discussions of artists' theoretical writings and group manifestoes, such as those of the Futurists, Dadaists, Surrealists, Constructivists, and DeStijl, in addition to select secondary readings. 6 credits, AL; LA, IS, Spring-R. Elfline
112. Chinese Painting Since the tenth century in China, a tension emerges between art created as a means of self expression and works which were intended to display social status and political power and to convey conventional values. This course concentrates on the primary site of this tension, the art of painting. We will explore such issues as the influence of Confucian and Daoist philosophy on painting and calligraphy, the changing perception of nature and the natural in art, the politics of style, and the increasing dominance of poetry rather than narrative as a conceptual construct for painting. Prerequisite: Any one term of art history. 6 credits, $A L, R A D ; L A, I S$, Spring-K. Ryor

## 215. Cross Cultural Psychology in Prague: Modern Art in the Czech Lands: Nineteenth-Twenty-

 first Centurie The course provides an introduction to various aspects of contemporary arts and architecture in Czech culture. Students will examine the relationship between the construction of memory and the construction of contemporary art, architecture, and writings through lectures, discussions, and visits to galleries and architectural sites within the city of Prague. 4 credits, $S / C R / N C$, AL; LA, Winter-Non-Carleton faculty220. Gender and Genre in the Floating World: Japanese Prints Pictures of the floating world, or ukiyo-e, were an integral part of popular culture in Japan and functioned as illustrations, advertisements, and souvenirs. This course will examine the development of both style and subject matter in Japanese prints within the socio-economic context of the seventeenth through twentieth centuries. Emphasis will be placed on the prominent position of women and the nature of gendered activity in these prints. Prerequisite: Any one term of art history. 6 credits, AL; LA, IS, Not offered in 2010-2011
221. History of Photography This course covers nineteenth and twentieth century photography from its origins to the present. It will consider formal innovations in the medium, the role of photography in society, and the place of photography in the fine arts. Prerequisite: Any one term of art history. 6 credits, AL, RAD; LA, Fall-B. Jarman
222. Women in Art The study of art about and produced by women in the west from the Renaissance to the present. Attention to the ways gender identity is constructed in the arts, the conditions under which women have worked, the ideologies and institutions that have shaped their relationships to the arts, the feminist critique of the discipline of art history. Prerequisite: Any one term of art history. 6 credits, $A L$, WR, RAD; LA, WR2, Spring-A. Kettering
223. The Sistine Chapel The course will focus on Michelangelo, Botticelli, Raphael and others to the Sistine Chapel. The artistic, architectural, political, liturgical, theological, and historiographical contexts will all be considered. Important for discussion, too, will be such questions as how the chapel decorations served as forms of communication and persuasion; why the controversies surrounding its recent cleaning figured in the news; why the Sistine Chapel has retained such power for us today. More generally, the course should stimulate thinking about the social and cultural roles and values attributed to art both of the past and present. Prerequisite: Any 100-level art history course or permission of instructor. 3 credits, AL; LA, Not offered in 2010-2011
224. El Greco to Goya: Spanish Art of the Golden Age Spanish painting, sculpture, and prints on the Iberian peninsula from the Renaissance to the nineteenth century, with major consideration of such artists as El Greco, Ribera, Velázquez, Murillo and Goya. Themes include Spanish concepts of nature and resistance to naturalism, the association of art and power at the Madrid court and in monasteries, gender and its constructions, the roles of various media in creating and confronting authority, and encounters between folk and "high" art. Students electing to take the course for four credits will write one less paper and take a shortened final exam. Prerequisite: Any one term of art history or permission of the instructor. 4 or 6 credits, AL; LA, Not offered in 2010-2011
225. Van Eyck, Bosch, Bruegel: Their Visual Culture Secular and religious painting during the "northern renaissance" of the fifteenth and sixteenth centuries. The transformation of late medieval artistic forms through the influence of humanism and the Reformation. Artists include Jan van Eyck, Rogier van der Weyden, Hieronymus Bosch, Matthias Grünewald, and Pieter Bruegel. Students electing to take the course for four credits will write one less paper and take a shortened final exam. Prerequisite: Any one term of art history or permission of the instructor. 4 or 6 credits, $A L, W R, L A, W R 2$, Not offered in 2010-2011
226. Italian Renaissance Art Painting and sculpture in fifteenth and sixteenth century Florence, Rome, and Venice and the Mannerist reaction to that art. Particular attention given to the works of Masaccio, Piero della Francesca, Leonardo, Raphael, Michelangelo, Pontormo, and Titian, as well as the artistic implications of various types of patronage and urban traditions. Prerequisite: Any one term of art history or permission of the instructor. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
227. Rembrandt, Vermeer and Netherlandish Art A survey of Dutch and Flemish painting from the fifteenth through the nineteenth centuries in its cultural and historical context. Special attention will be given to the art of van Eyck, Memling, Vermeer and, especially Rembrandt. Topics will include the implications of Protestantism in the Dutch Republic, the development of genre painting and the riddle of realism. Prerequisite: Any one term of art history or permission of the instructor. 6 credits, $A L, W R ; L A$, WR2, Not offered in 2010-2011
228. Art Since 1945 Art from abstract expressionism to the present, with particular focus on issues such as the modernist artist-hero; the emergence of alternative or non-traditional media; the influence of the women's movement and the gay/lesbian liberation movement on contemporary art; and postmodern theory and practice. Prerequisite: Any one term of art history. 6 credits, $A L, W R$, LA, WR2, IDS, FallR. Elfline
229. Decadent Dandies and Romantic Reformers: The Anglo-American Aesthetic Movement, $\mathbf{1 8 7 0 - 1 9 0 0}$ Espousing the credo of "art for art's sake," the Aesthetic Movement sought to liberate artistic expression from Victorian morality and philistinism. But clear definitions or precise boundaries for the movement remain elusive. Arising out of the Pre-Raphaelite Movement, intersecting with the Arts and Crafts Movement, and feeding into the Art Nouveau Movement, the Aesthetic Movement emerged in Britain around 1870 and spread to the United States shortly thereafter. Figures who will receive significant attention include the painters James McNeill Whistler and Dante Gabriel Rossetti, art critics Walter Pater and Oscar Wilde, and architects and designers E.W. Godwin and William Morris. Prerequisite: Any 100-level art history course. 6 credits, AL; LA, Not offered in 2010-2011
230. Modern Architecture The history of the modern movement from its beginnings in the nineteenth century to its triumph in the mid-twentieth century. Architects studied include Sullivan, Wright, Gropius, Le Corbusier, Mies van der Rohe. Prerequisite: Any one term of art history. 6 credits, $A L$; $L A$, Not offered in 2010-2011
231. Architecture Since 1950 This course begins by considering the international triumph of architecture's Modern Movement as seen in key works by Mies van der Rohe, Le Corbusier and their followers. Soon after modernisms rise, however, architects began to question the movement's tenets and the role that architecture as a discipline plays in the fashioning of society. This course will examine the central actors in this backlash from Britain, France, Italy, Japan, the United States and elsewhere before exploring the architectural debates surrounding definitions of postmodernism. The course will conclude by considering the impact of both modernism and postmodernism on contemporary architectural practice. 6 credits, AL; LA, Not offered in 2010-2011
232. Ruins and Romantics: English Gothic and Gothic-Revival Art and Architecture The culture shock of the Industrial Revolution in England sparked a favorable reappraisal of the Middle Ages, previously regarded as a bleak historical epoch. Starting in the late eighteenth century, Gothic

Revivalists, skeptical of machine-age progress, sought to revitalize imagined qualities of medieval society, such as spirituality, craftsmanship, and communalism. This course will explore interpretations of medieval English culture by anti-modernists such as the Pre-Raphaelites, Arts and Crafts workers, and others. This course is part of the OCS winter break England program, involving two linked courses in fall and winter terms; this class is the first class in the sequence. Prerequisite: Two art history courses and permission of the instructor. 6 credits, AL; LA, IS, Fall-B. Jarman
286. Legacies of the Avant-Garde: Dada Then and Now By definition, the artistic neo-avantgarde of the post-1945 era looked back to the historical avant-garde movements of the early twentieth century for inspiration and ideological support. This course will examine how one such historical movement, Dada, has continued to play a profound role in shaping how artists define art and use the art object as an active force to radically alter everyday life. In particular, we will investigate the ways in which Dadaists used chance, humor, irony, negation and the ready made to challenge the institution of art, and then trace the legacies of these practices in recent artistic practice. Prerequisite: Any one art history class. 6 credits, AL, WR; LA, WR2, Winter-R. Elfline
288. Curatorial Seminar An art museum collects artifacts as emblems of creativity, examples of craftsmanship, and as "emissaries of culture." The collection, often an accumulation of donated personal collections, is a reminder of past tastes and institutional practices. This course will entertain theoretical and historical questions about the nature of museums and collections, and also engage with practical museum procedures and projects. Assignments will bring into focus the special history and function of art collections and museums in a college context. Students will contribute to an exhibition and speculate on possible curricular uses of the Carleton College collection. Prerequisite: Permission of the instructor. 6 credits, AL; LA, Not offered in 2010-2011
298. Seminar for Art History Majors An intensive study of the nature of art history as an intellectual discipline and of the approaches scholars have taken to various art historical problems. Attention as well to principles of current art historical research and writing. Recommended for juniors who have declared art history as a major. 6 credits, $S / C R / N C, A L ; L A$, Spring-B. Jarman
308. Planning Utopia: Ideal Cities in Theory and Practice This five-week seminar will survey the history of ideal plans for the built urban environment. Particular attention will be given to examples from about 1850 to the present. Projects chosen by students will greatly influence the course content, but subjects likely to receive sustained attention include: Renaissance ideal cities, conceptions of public and private space, civic rituals, the industrial city, Baron Haussmann's Renovations of Paris, suburbanization, the Garden City movement, zoning legislation, Le Corbusier's Ville Contemporaine, Frank Lloyd Wright's Broadacre City, New Urbanism and urban renewal, and planned capitals such as Brasília, Canberra, Chandigarh, and Washington, D.C. Prerequisite: Any one term of art history. 3 credits, AL; LS, IS, Not offered in 2010-2011
309. Historic Preservation This five-week seminar will provide a general introduction to the topic of historic preservation. We will study the evolution of the field and consider theoretical, practical, ethical, and legal issues pertaining to the selective maintenance of the built environment. Projects chosen by students will greatly affect the course content, but subjects likely to receive sustained attention include: the pedagogy of site interpretation, historic districting, private versus public preservation schemes, heritage tourism, industrial site preservation, UNESCO World Heritage sites, downtown revitalization projects, historic house management, and preservation legislation. Several field trips will be required for this course. Prerequisite: Any one term of art history. 3 credits, AL; LA, IDS, Not offered in 2010-2011
310. The Architecture of Frank Lloyd Wright This seminar will examine the buildings of Frank Lloyd Wright as part of both an American architectural tradition and an emerging international modern architecture movement. We will study Wright's enigmatic personality, tracing interconnections between his personal life, his professional career, and his architectural principles. Wright's work will be
positioned within a social history of the United States that focuses upon changing notions of domesticity and urbanism. We will also examine Wright's fascination with new building technologies and his extensive work in the decorative arts. We will visit several major Wright landmarks during a weekend field trip to Chicago in May. Prerequisite: Any one art history or American studies course. 6 credits, $A L$; LA, Not offered in 2010-2011
320. Japanese Theater: Visualizing Narrative Across Media This course will address the ways various forms of theater in Japan have responded to changing social and political forces over their histories. It will also interrogate the intersections, as well as crucial differences, between literary drama, performance, and representation in print media. Students will read a number of Kabuki and Noh plays, view films of performances of these plays, study illustrated books that preserve visual and textual records of performances, examine woodblock prints of actors in their roles from the eighteenth through twentieth centuries, and look at the development of costumes and masks. Prerequisite: Any 100 level art history course or Japanese studies course. 6 credits, AL; LA, IS, Winter-K. Ryor
340. Theories of Postmodernism In this discussion-based seminar, students will look closely at a series of key texts that have come to epitomize the historical rupture between modernism and postmodernism in visual culture. As "postmodernism" refers neither to a cohesive movement, nor to a specific style, we will investigate the web of various theories and political positions that represent a fundamental rethinking of modernism's aims. Specifically, we will consider the following themes as they relate to cultural practices from the 1960s to the present day: deconstruction, the death of authorship, postfeminism, simulation, post-colonialism and globalization. Prerequisite: Any two art history courses. 6 credits, AL; LA, Offered in alternate years, Spring-R. Elfline
351. English Art and Architecture on Site This course is the second part of a two-term sequence beginning with Art History 251. The course starts with a two-week winter break trip in England, where we will visit many architectural sites and museum collections. During the winter term the course continues on campus, where each student will complete an independent research project involving regular progress reports, a formal presentation, and a final written paper. Prerequisite: Art History 251. 6 credits, AL; LA, IS, Winter-B. Jarman
400. Integrative Exercise The integrative exercise for the art history major has two components: 1) A presentation to introductory students of a topic chosen by the senior; 2) A three-hour examination, made up and graded by an outside examiner, on western art with emphasis on the period from the Renaissance to the present. Each component is worth three credits. 6 credits, $S / N C$, ND; NE, Fall, Winter, SpringK. Ryor

## Studio Art Courses (ARTS)

110. Observational Drawing A beginning course for non-majors and for those who contemplate majoring in art. The aim of the course is to give the student an appreciation of art and of drawing. An understanding of aesthetic values and development of technical skills are achieved through a series of studio problems which naturally follow one another and deal with the analysis and use of line, shape, volume, space, and tone. A wide range of subjects are used, including still life, landscape and the human figure. No prerequisites. 6 credits, AL; ARP, Fall, Winter, Spring-D. Bruggeman, F. Hagstrom, D. Lefkowitz
111. Field Drawing A beginning drawing course for science students and others who are interested in developing their skills in drawing from nature. Much of the classwork will be done outdoors and deal directly with drawing from plant forms, geological sources, and the landscape as subjects. Emphasis will be placed on the development of the technical skills needed for visual note-taking and development of journals. Problems will deal with the analysis of space and objects through line, shape, volume, and tone. No prerequisites. 6 credits, $A L ; A R P$, Spring-D. Bruggeman
112. Introduction to Sculpture The ability to build structures that reflect or alter the environment is a basic defining characteristic of our species. In this class we explore creative construction in three dimensions using a variety of media, including plaster, wood, and steel. Using both natural and architectural objects for inspiration, we will examine and manipulate form, space, and expressive content to develop a deeper understanding of this core trait and reawaken our experience of the spaces we inhabit. 6 credits, AL; ARP, Fall, Winter, Spring-S. Mohring
113. The Digital Landscape Study nature aesthetics and examine your assumptions about the landscape photograph. Question the formal, moral and biological implications of your "framed view-point," as you move your lens across the prairies, woods and farmer's fields of Northfield. Reflect on the ways in which nature has been visually represented in the classroom, creating a three-way intersection between art, science and technology, and nostalgia. In particular, what are the effects of two-dimensional representation on our estrangement from nature itself? Demonstrations, readings, discussions and field trips will help the student create a final portfolio of digital prints and text. Student must provide their own digital camera. 6 credits, AL; ARP, Not offered in 2010-2011
114. Life Drawing The human form will be the major concentration using drawing as a means to heighten an awareness and sensitivity to form. A variety of media and materials will be explored: pencil, ink, conte, charcoal and collage. Prerequisite: Studio Art 110. 6 credits, AL; ARP, Fall-D. Bruggeman
115. Studio Art Seminar in the South Pacific: Mixed-Media Drawing This course involves extending basic drawing problems by use of varied media and scale. Processes used could include watercolor, pen and ink, and bookbinding. Prerequisite: Studio Art 110 or 113.6 credits, AL; ARP, Winter- $\boldsymbol{F}$.
Hagstrom
116. Ceramics: Throwing This course is an introduction to wheel throwing as a primary method to construct both functional and non-functional ceramic forms. An understanding of aesthetic values and technical skills are achieved through studio practice, readings, and demonstrations. Basic glaze and clay calculations, kiln firing techniques, and some handbuilding methods will be covered. Prerequisite: Studio Art 110, 113 or 122.6 credits, $A L ;$ ARP, Fall-K. Connole
117. Ceramics: Handbuilding This course is an introduction to handbuilding as a primary method to construct both functional and non-functional ceramic forms with a focus on experimentation. An understanding of aesthetic values and technical skills are achieved through studio practice, readings, and demonstrations. Basic glaze and clay calculations, kiln firing techniques, and basic throwing methods will be covered. Prerequisite: Studio Art 110, 113 or 122.6 credits, AL; ARP, Winter-K. Connole
118. Photography I This course introduces the student to the operation of the 35 mm camera, film processing and black and white printing techniques. Through lectures, demonstrations, readings, field trips and critiques we rigorously view and question the nature of photography. Assignments will cover a range of photographic genres. A personal investigation of these photographic experiences will result in a final portfolio of finished prints and accompanying field guide. Some manual cameras provided, check with instructor. Prerequisite: Studio Art 110 or 113.6 credits, AL; ARP, Winter-L. Rossi
119. Introduction to Film and Digital Photography Learn the fine art of both black and white and color photography through the use of light sensitive silver and pigmented ink. Like the alchemist we will separate and join together the materials, concepts and technology of the past with today's digital image. As we transition between chemicals in the darkroom and Photoshop in the digital lab we will explore the creative and cultural nature of photography. Studio production will be promoted through field trips, readings and critiques. Students will need their own digital camera, however film cameras will be provided. Prerequisite: Studio Art 110 or 113.6 credits, AL; ARP, Spring—L. Rossi
120. Metalsmithing A basic course in metal design and fabrication of primarily jewelry forms and functional objects. Specific instruction will be given in developing the skills of forming, joining, and
surface enrichment to achieve complex metal pieces. Using both natural and man-made objects as source material, the course complicates the concept of adornment and examines how jewelry forms relate to the human body. Found materials will be used in addition to traditional metals including copper, brass, and silver. Prerequisite: Studio Art 110, 113 or 122.6 credits, AL; ARP, Spring-K. Connole
121. Painting The course serves as an introduction to the language of painting. Students develop a facility with the physical tools of painting-brushes, paint and surfaces--as they gain a fluency with the basic formal elements of the discipline--color, form, value, composition and space. Students are also challenged to consider the choices they make in determining the content and ideas expressed in the work, and how to most effectively convey them. Prerequisite: Studio Art 110 or 113.6 credits, $A L ; A R P$, Fall, Spring-D. Lefkowitz
122. Water Based Painting This course introduces students to the basic principles of painting with watercolor, gouache and acrylic paint. Specific instruction will be offered in developing skills in surface preparation, paint application and color mixing. Through lectures, demonstrations and critique we will explore basic tenets of pictorial arrangement and develop an individualized approach to ideas and content. Prerequisite: Studio Art 110 or 113. 6 credits, AL; ARP, Not offered in 2010-2011
123. Studio Art Seminar in the South Pacific: Printmaking Intaglio and relief printmaking using the facilities of host universities. Students will receive instruction in all of the processes of intaglio and relief printmaking. Students will explore the possibilities of this form of printmaking in conjunction with their work in a drawing class. Prerequisite: Studio Art 110 or 113.6 credits, AL; ARP, Winter-F.

## Hagstrom

274. Printmaking Students will select from intaglio, relief, lithography, silkscreen, or letterpress printing. Both terms are open to beginning or intermediate levels of experience. The course involves developing an image over time, taking advantage of a rich and demanding process. Students receive a sound technical training in at least one of the print processes. Grade will be based on the final portfolio, examining both growth in image and technical facility. Prerequisite: Studio Art 110 or 113.6 credits, AL; ARP, Fall-F. Hagstrom
275. Studio Art Seminar in the South Pacific: Physical/Cultural Environment of Australia and New Zealand An interdisciplinary course which examines how Australia and New Zealand have changed since colonization. We will examine both how the physical landscape has been changed through agriculture, mining and the importation of non-native species as well as studying the unique social and political climates of two countries which share a history of colonization. The course will use readings, meetings with visiting artists and lectures as well as visits to cultural centers. 6 credits, S/CR/NC, SS, RAD; LA, IS, Winter-F. Hagstrom
276. Paper Arts: Sculptural Technique This class introduces students to the principal aspects of hand papermaking. Work will include processing raw fiber and recycled materials, dyeing and pigmenting pulp, exploring Eastern and Western sheet formation styles, and examining various drying and finishing techniques. While sheet formation will be explored, emphasis will be placed on the sculptural applications of handmade paper. Students will construct moulds, cast paper pieces, and create threedimensional objects through the use of armatures. Throughout the course, the history of paper will be discussed. Prerequisite: Studio Art 110 or 113. 6 credits, AL; ARP, Winter-J. Rathermel
277. Paper Arts: Artist's Books and Printmaking This course provides an introductory instruction in printmaking while working in the book format. Students will learn at least one print technique in addition to various styles of binding. Through visits to special collections as well as narrative student projects, we will also begin an exploration of the medium of an artist's book. Prerequisite: Studio Art 110. 6 credits, AL; ARP, Not offered in 2010-2011
278. Paper Arts: Binding and Two-Dimensional Applications This class introduces students to the fundamentals of handmade paper with special emphasis placed on its use as a substrate for printing, drawing, painting, and other media. Colorants, additives, fiber preparation and finishing techniques will be examined as will various sheet formation techniques including the use of stencils and pulp painting. The second half of the course will introduce students to a variety of binding techniques. Sewn singleand multi-signature bindings will be presented as will various adhesive bindings, decorative spine book structures, traditional Japanese bindings, hard cover formats, historical designs and non-traditional embellishment techniques. Prerequisite: Studio Art 110 or 113. 6 credits, AL; ARP, Not offered in 20102011
279. Critical Issues in Contemporary Arts Required for the studio major, and recommended for the junior year, this seminar is for student artists considering lives as producers of visual culture. The goal in this class is to develop a familiarity with important questions, both practical and theoretical, facing artists today. We will examine how art is disseminated, understood, and at times, misunderstood. Be prepared to read, write about, and discuss essays, criticism, and interviews covering a wide range of media, and visit artists' studios and exhibition venues. Students will help select topics, direct discussions, and organize a brief presentation about their own artistic development. 6 credits, $S / C R / N C$, AL; ARP, Spring-D. Lefkowitz
280. Sculpture: Form and Context In this seminar we will expand on our exploration of sculpture-further developing the studio based investigation of Arts 122 while adding interior and exterior site specific installation, robotics, and digital media, to the range of possibilities. Prerequisite: Studio Art 122 or by permission of the instructor. 6 credits, AL; ARP, Winter-S. Mohring
281. Woodworking: The Table This class explores the wondrous joys and enlightening frustrations of an intensive material focus in wood. From the perspective of both functional and non-functional design, we will examine wood's physical, visual, philosophical, and expressive properties. Several short projects will culminate in an examination of the table as a conceptual construct, and five week design/build challenge. Prerequisite: Studio Art 122 or by permission of the instructor. 6 credits, AL; ARP, SpringS. Mohring
282. Advanced Ceramics This course is a continuation of either or both beginning courses, focusing on sophisticated handbuilding and throwing techniques and advanced problem solving in ceramics.
Development of a personal voice is encouraged through open-ended assignments deepening exploration into the expressive nature of clay. Glaze calculations, kiln firing theory, and alternative firing techniques will broaden approaches to surface design. Prerequisite: Studio Art 230 and/or Studio Art 232. 6 credits, AL; ARP, Spring-K. Connole
283. Advanced Photo: Digital Imaging This course will explore the technical, aesthetic and critical issues of digital media. The student will work with digital cameras, scanners, printers and the Photoshop program. Through specific assignments, field trips and personal experimentation students will broaden their understanding of this new media. Students will need their own digital camera. Prerequisite: Studio Art 110 or 113 and 238.6 credits, AL; ARP, Winter-L. Rossi
284. Advanced Film and Digital Photography In advanced photography we will study the work of a broad range of contemporary photographers, who utilize both medium and large format cameras and studio and natural lighting, to create important and compelling works of art. We will build upon the skills and concepts you learned in Introduction to Film and Digital Photography through the use of new photographic tools and ideas. Increasing our photoshop skills we will learn to both edit and sequence images, to create a photographic book and portfolio. Students will need their own digital camera. Prerequisite: Studio Art 110 or 113 and 240 or permission of professor. 6 credits, AL; ARP, Not offered in 2010-2011
285. Advanced Metals This course continues the investigation of metalsmithing with more focus on
vessel making, hollow forms, boxes, and the development of a personal voice in metal. Techniques explored include raising, fabrication, lost wax casting and further development of surfaces on both copper and silver. Prerequisite: Studio Art 251.6 credits, AL; ARP, Fall-K. Connole
286. Advanced Painting and Drawing This course is designed for students who want to explore these 2-D media in greater depth. Students may choose to work exclusively in painting or drawing, or may combine media if they like. Some projects in the course emphasize strengthening students' facility in traditional uses of each medium, while others are designed to encourage students to challenge assumptions about what a painting or drawing can be. Two major assignments make up the core of the course-one focuses on art making as an evolving process and the other on a critical engagement with systems of visual representation. Prerequisite: Studio Art 110 and 260 (for students focusing on painting) or two prior drawing or printmaking courses from the following group: Studio Art 110, 113, 210, 212, and 274 (for students focusing on drawing). 6 credits, AL; ARP, Winter-D. Lefkowitz
287. Advanced Printmaking and Book Arts This course is a continuation from the introductory level print courses, offering instruction in any of the print media- intaglio, relief, silk-screen, lithography and letterpress. In addition, several binding techniques are taught, and some of the assignments can be fulfilled by book-based projects. 6 credits, AL; ARP, Spring-F. Hagstrom
288. Integrative Exercise 6 credits, $S / N C$, ND; NE, Fall, Winter, Spring—Staff

## ASIAN LANGUAGES AND LITERATURES

Chair: Professor Kathryn W. Sparling<br>Professors: Mark Hansell, Mariko Kaga, Kathryn W. Sparling, Qiguang Zhao<br>Associate Professor: Noboru Tomonari<br>Assistant Professor: Hong Zeng<br>Visiting Instructor: Lan Liana Tan

The department of Asian Languages and Literatures offers introductory, intermediate, and advanced courses in Chinese and Japanese language, plus a variety of courses in traditional and modern Chinese and Japanese literature in English translation and some linguistics courses related to Asian Languages. Accommodation can be made for students who can speak, but cannot read or write the languages. At the intermediate level, students are encouraged to participate in one of several approved academic programs in China or Japan. A major in Chinese or Japanese is available by petition.

Certificate of Advanced Study in Foreign Language and Literature or Area Studies: In order to receive the Certificate of Advanced Study in Asian Languages students must fulfill the general requirements (refer to Academic Regulations) in the following course distribution: six courses beyond 204, excluding Chinese 310, choosing either Japanese or Chinese as the target language. At least four of the six courses must be taught in the target language; at least one must be a course in literature or linguistics related to the target language and conducted in English, and the remaining course may be chosen from either category. Although courses for the certificate may be taken on a S/CR/NC basis, "D" or "CR" level work will not be sufficient to satisfy course requirements.

Language Houses: Students have the opportunity to immerse themselves in the language by living in the Language House. The Associate is a native speaker, and students organize and participate in numerous cultural activities in the language houses.

## Asian Language Courses (ASLN)

111. Writing Systems The structure and function of writing systems, with emphasis on a comparison of

East Asian writing systems (Chinese, Japanese, Korean) to Western alphabetic systems. Topics covered include classification of writing systems, historical development, diffusion and borrowing of writing systems, and comparison with non-writing symbol systems. 6 credits, SS; SI, Fall—M. Hansell
231. Intercultural Texts: Japanese and Indian Women Writing Abroad A close look at a variety of novels and short stories that present one culture to another and (defamiliarized, often in translation) to itself. The Indian texts were written in English, largely about India. The Japanese texts were originally written in Japanese and are set in Australia, France, and the U.S. cultural phenomena such as mutual exoticism, bicultural families, cultural (dis)integration, and racial prejudice, are central to all the texts chosen. They give fundamental place to contemporary women living outside their "mother" cultures. No prerequisites, no knowledge of Japan or India required. 6 credits, AL; LA, IS, Not offered in 2010-2011
237. Tao of Wisdom in Asian Literature We will enter the poetic and philosophical world formed by Lao Tzu's Tao Te Ching, Gibran's Prophet, Tagore's Stray Birds, and other masterpieces by Asian as well as some Western thinkers in the same spiritual world. These writers have found a common way by which liberty, health, and joy may be shaped through words and images. Together we will find the beauty hidden in the mysteries of nature and the wisdom in daily life. We will also do some mental practices, such as Taichi and meditation, to appreciate the hidden beauty and to improve our wisdom. 6 credits, AL; LA, IS, Not offered in 2010-2011
260. Historical Linguistics Concepts and techniques of historical linguistics, especially methods used in the discovery of family relationships between languages and the reconstruction of ancestral forms. Other topics include grammatical, semantic, and lexical change, processes of sound change, language contact, and the use of linguistic evidence in cultural reconstruction. In addition to the more familiar IndoEuropean languages, data will come from Western Pacific and Australian languages, and especially East Asian languages. Prerequisite: previous experience in linguistics or instructor's permission. 6 credits, SS; SI, Not offered in 2010-2011

## Chinese Courses (CHIN)

101, 102, 103. Elementary Chinese Introduction to Chinese sentence structure and writing system, together with the development of basic aural/oral skills, with attention to the cultural context. Students who have learned spoken Mandarin Chinese at home or in another context, but who are unable to read or write, are encouraged to consult the department about the possibility of an independent study in Chinese Literacy given fall term. This six credit independent study will cover all the Chinese characters introduced in Chinese 101-204. Successful completion will allow the student to register for Chinese 205 winter term. 6 credits, ND; NE, Fall, Winter, Spring—M. Hansell, L. Tan, H. Zeng
115. The Taoist Way of Health and Longevity: Taichi and Other Forms We will study Taichi's theory, practice its movements, explore its invisible thoughts, and read texts concerning it. The course also includes other ways to health and longevity, such as traditional mind-breath meditation and other forms. This course stresses not only mental and physical well-being but also the philosophical roots of health and wisdom formulated in Chinese classics. All readings in English translation. No prerequisites. 6 credits, S/CR/NC, AL, RAD; LA, Not offered in 2010-2011

204, 205. Intermediate Chinese Equal emphasis on the development of the four skills: reading, writing, speaking, and listening comprehension, with special attention to activization. The college language requirement is met in Chinese with the completion of Chinese 205. 6 credits, ND; NE, Fall, Winter-M. Hansell, H. Zeng
206. Chinese in Cultural Context This course advances students' proficiency in oral and written Chinese, at the same time integrating elements of traditional Chinese civilization and modern Chinese society. Emphasis is on cultural understanding and appropriate language use. Prerequisite: Chinese 205 or the equivalent. 6 credits, $N D ; N E$, Spring-L. Tan
207. Chinese Studies Seminar in Tianjin: Chinese Language This course builds oral and written proficiency, emphasizing expressive ability, accuracy of grammar, and pronunciation. Students learn to read, write, and speak Chinese inside and outside of the classroom. Prerequisite: Chinese 103 or the equivalent. 9 credits, ND; NE, Fall-Q. Zhao
212. Chinese Studies Seminar in Tianjin: Chinese Culture Local masters will teach Chinese calligraphy, art, Peking opera, Taichi, and/or other martial arts to students, immersing them in the Chinese artistic and spiritual world. 3 credits, $S / C R / N C$, $A L$; LA, Fall-Q. Zhao
235. Beauty, Good, and Evil in Chinese Literature in Translation This course will focus on the themes of beauty, good, and evil in some well-known Tang and Song poems and tales, and modern short fiction by Lu Xun, Lao She, and other writers. The course will explore both modern and classical Chinese in its cultural and historical context. All readings in English translation. No prerequisites. 6 credits, AL, RAD; LA, Not offered in 2010-2011
240. Chinese Cinema This course selects around twenty Chinese films from 1920s to today, including masterpieces produced by mainland, Hong Kong, Taiwanese, and overseas Chinese film directors. Films are studied in terms of the innovation of film techniques, relationship to literature, MTV, documentary, painting, world cinema, and historical and cultural background. The students' final reports on an individual film will include another 10-20 films for examination. Film clips will be put on Moodle with specific questions to elicit detailed study of film language. In English translation. 6 credits, $A L, R A D$; LA, Not offered in 2010-2011
241. Twentieth Century Chinese Literature and Film in Translation The course examines the literary legacy of May 4th writers, such as Lu Xun, Sheng Congwen, Ding Ling, and their impact on contemporary writers, especially on writers creating after the June 4th event. Themes include: cultural cannibalism, imaginary nostalgia, female subjectivity, and historical/dehistoricized violence. Chinese films (from the first to the sixth generation) were selected to match the thematic concerns of the literature. In English translation. 6 credits, AL, RAD; LA, Spring-H. Zeng
248. The Structure of Chinese This course uses linguistic methodology to examine the structure of Modern Standard Chinese. Its purpose it to give students a greater insight into the systems and logic at the heart of the Chinese language, both to help them better appreciate the beauty and elegance of language structure, and to help them more effectively learn the language. Topics covered will include the sound system, word formation, syntax, and semantics. No prior experience with linguistics is necessary, but students should have studied at least a year of Chinese or its equivalent. Readings and discussion will be in English. Prerequisite: Chinese 103 or equivalent. 6 credits, SS; SI, Not offered in 2010-2011
282. Chinese Studies Seminar in Tianjin: Chinese Civilization This lecture course includes a general introduction to Chinese literature, history, geography, and society. It examines the social, ideological, and literary basis of Chinese civilization and society. The course will be conducted in English accompanied by some Chinese vocabulary with its English translation. 6 credits, AL, RAD; HI, IS, Fall-Q. Zhao
307. Chinese Studies Seminar in Tianjin: Advanced Chinese Language This course builds oral and written proficiency, emphasizing expressive ability, accuracy of grammar, and pronunciation. Students learn to read, write, and speak Chinese inside and outside of the classroom. 9 credits, ND; LA, Fall- $\mathbf{Q}$. Zhao
310. Chinese Maintenance This course gives students at the 300 level a chance to continue to practice their reading, speaking, and listening skills when a 300 -level course is not available. Class will meet once a week to discuss readings, and students will have conversation practice opportunities with tutors. Does not count toward major or certificate. Prerequisite: Chinese 206 or equivalent. 2 credits, $S / C R / N C$,
347. Advanced Readings in Contemporary Chinese Prose: Newspapers Readings from PRC and Taiwan newspapers will expose students to formal written Chinese. Emphasis is on vocabulary expansion, text comprehension strategies, and differences between colloquial and written usage. Active use of the language (including oral discussion and regular written compositions) will be stressed. Prerequisite: Chinese 206 or the equivalent. 6 credits, AL; NE, Not offered in 2010-2011
348. Advanced Chinese: The Mass Media This conversation and composition course will be centered around a Chinese feature film, with additional materials including TV shows, TV commercials, and written materials. Emphasis will be on culturally appropriate language use, and on discussion of the social issues that are implicitly and explicitly addressed on the Chinese-language media. 6 credits, $A L$; NE, Spring-M. Hansell
349. Advanced Chinese: Social Commentary This course will focus on increasing students' ability to read, write, and speak about contemporary social issues through readings, essay writing, oral presentations, and class discussion. Readings will be from leading twentieth century Chinese reformers and social critics. 6 credits, AL; HI, Not offered in 2010-2011
350. Advanced Chinese: Poems and Stories Introduction to traditional and modern Chinese poems and short stories. The most beautiful poems ever written by the Chinese language help students to experience beauty, inspiration, and emotional purification. Selected stories read and discussed in detail will advance students' proficiency in oral and written Chinese. 6 credits, AL; LA, Not offered in 2010-2011
355. Contemporary Chinese Short Stories and Films An advanced Chinese language course that will introduce contemporary short stories and films in the orginal language. The selected stories represent the writing styles of some well-known contemporary Chinese writers such as Yu Hua, Su Tong, Wang Meng, Liang Sizosheng, and Wang Anyi. The selected films were mainly directed by the acclaimed fifth generation film directors such as Cheng Kaige and Zhang Yimou. The historical, cultural and literary forces that shape these creations will be examined. 6 credits, $A L$; LA, Not offered in 2010-2011
356. Modern and Contemporary Women Writers The course materials encompass the extremely diverse beauty of prose works and poetry by representative modern and contemporary Chinese women writers, including Zhang Ailing, Ding Ling, Xiao Hong, Shu Ting, Huo Yongming, Yi Lei, Wang Anyi, Li Ang, Can Xue, Lin Bai, Chen Ran, and Hai Nan. Historical condition, female subjectivity and modes of expression, literary heritage and innovation are examined. This is an advanced language course and includes films concerned with female lives. Prerequisite: Chinese 206 or equivalent. 6 credits, $A L ; L A$, Not offered in 2010-2011
357. Advanced Chinese: Contemporary Social Issues This is an advanced Chinese language course, employing multimedia materials (texts and documentary movie) on the most debated social issues of contemporary China: self-owned enterprises, single child policy, the education of children, status of modern women, economic and political reform. Debate, discussion and composition will provide ample opportunity for improving spoken and written Chinese. Cultural materials will bring students immediate contact with the contemporary China scene, and the ways in which people speak in real life in China today. Prerequisite: Chinese 206 or equivalent. 6 credits, AL; HI, Winter-H. Zeng
358. Chinese Idiom Stories This advanced language course uses Chinese "idiom stories" as materials. These idioms, coming from ancient Chinese historical and philosophical books, not only crystalize Chinese wisdom and schools of thought, but are also a lively part of daily language of today. Being able to use them correctly will enliven your daily speech with humor, refinement and cultivation, and demonstrate the fact of your familiarity with Chinese culture. Includes dramatic staging of these stories and illustrations of their usage in daily life. Prerequisite: Chinese 206 or equivalent. 6 credits, $A L ; L A$, Not offered in 2010-2011
360. Classical Chinese Classical Chinese dominated traditional Chinese culture with its concise grammar, powerful rhetoric, and graceful rhythm. It represents the dignity and glory of an enduring civilization of 5,000 years. Far from being dead, Classical Chinese is frequently referred to and quoted in modern Chinese texts. We will read the elegant essays, wise fables and charming poems written by Confucian masters, Taoist philosophers, and traditional poets. The class will pay attention to the modern application of classical Chinese. We will proceed slowly and thoroughly, immersing ourselves in words that are stronger than swords. Prerequisite: Chinese 206 or equivalent. 6 credits, AL; LA, Not offered in 2010-2011

## Japanese Courses (JAPN)

101, 102, 103. Elementary Japanese Introduction to the Japanese sentence structure and writing system, together with the development of basic aural/oral skills, with attention to cultural context. 6 credits, ND; NE, Fall, Winter, Spring-M. Kaga
204, 205, 206. Intermediate Japanese Emphasis is on the development of reading skills, especially the mastery of kanji, with some work on spoken Japanese through the use of audiovisual materials. The college language requirement is met in Japanese with the completion of Japanese 205. Japanese 206 focuses on polishing and refining basic survival skills in Japanese. 6 credits, ND; NE, Fall, Winter, Spring-K. Sparling, N. Tomonari
230. Topics in Pre-Modern Literature in Translation A topical focus on Japanese poetry and prose from different ages before 1868, with attention to literary, aesthetic, and cultural tradition, and to the relationship between text and society. Consideration of reading strategies appropriate to Japanese literature in translation, and some inquiry into the art and the process of literary translation. 6 credits, AL; LA, Not offered in 2010-2011
231. Japanese Cinema in Translation This course examines the extraordinary achievement of Japanese cinema, from the classic films of Mizoguchi, Ozu, and Kurosawa to the pop cinema of Kitano and the phenomenon of anime. The films will be studied for their aesthetic, cultural, and auteur contexts. Particular attention will be paid to the relationship of the film to traditional arts, culture and society. This course is conducted in English and all the course materials are in English translation or in English subtitles. 6 credits, AL, RAD; LA, Not offered in 2010-2011
232. Autobiography in Modern Japan in Translation This course examines a variety of Japanese self-narratives from the early modern years to the present. The main texts include Japanese autobiographies as well as background readings that situate the autobiographies in the cultural milieu. We focus largely on the social, historical and economic aspects of the Japanese autobiographies, and discuss their significance. In addition, some texts of oral history that take the form of first-person narratives are explored, in order to make further enquiry into various autobiographical representations of the self, class, gender, ethnicity, and society in Japan. 6 credits, AL, RAD; LA, Not offered in 2010-2011
234. Modern Japanese Novel in Translation: Mothers/Daughters; Fathers/Sons Critical analysis of twentieth-century Japanese novels by Natsume Soseki, Tanizaki Junichiro, Kawabata Yasunari, Enchi Fumiko, Oe Kenzaburo, Tsushima Yuko and others, with special attention to the social and cultural context, and to reading strategies appropriate to that context. Most of the readings are from the 1960's or later, several of them are absolutely contemporary. All of them have to do with questions of identity, tradition, and generational change: what one might hope to pass on to one's real or metaphorical children, what one might hope to learn from one's real or metaphorical parents. 6 credits, $A L ; L A$, Not offered in 2010-2011
236. Classical Japanese Fiction: The Tale of Genji and Its World in Translation A close look at the great classic of Japanese fiction, with special attention to literary and aesthetic traditions and to the social and cultural context of Heian Japan. 6 credits, AL; LA, Winter-K. Sparling
237. Literature and Arts of Japan: 1333-1868 in Translation Introduction to the poetry, drama, and fiction of two contrasting eras. From the Muromachi culture, centering on Kyoto and permeated by the aesthetics of Zen Buddhism, the course will examine Noh drama, linked poetry, ink painting, tea ceremony, and garden architecture; from the vibrant, irreverent, urban culture of Edo, centering on Osaka and what is now Tokyo, it will focus on the kabuki and puppet theaters, haiku, comic fiction, and the woodblock prints of the Floating World. 6 credits, AL; LA, Not offered in 2010-2011
240. Literature and Society of Modern Japan in Translation In this course we will look at some canonical works of modern Japanese literature in translation such as those by Soseki, Tanizaki, and Mishima. Their works will be read in the context of Japanese modernity and the construction of the Japanese subject. The representation of society in literature will be discussed as well as the role of literature in society. We will also read contemporary works by Nakagami, Murakami, Yoshimura, and some authors writing in Okinawa in order to explore the intricate relationship between literary practice and modern Japanese society. 6 credits, AL, RAD; LA, IS, Spring-N. Tomonari
242. Japanese Poetry in Translation A topical survey of Japanese poetry in English translation, beginning with earliest written history (sixth century anonymous song), ending with blank verse from the present moment, including longer poetic forms from the Manyoshu, waka in the classical tradition, linked verse, comic senryu, haiku, and sonnets and other poetry from Western traditions. Consideration will be given to the literary, aesthetic, and social contexts of Japanese poetry. We will undertake exploration and analysis of individual poems by reference to the original Japanese and to multiple translations. Special attention will be given to the practice of composition and the process of translation. 6 credits, AL; LA, Not offered in 2010-2011
243. The Other in Modern Japanese Literature and Society in Translation This course is a study of major works of fiction, non-fiction, and cinema from 1906 to the present. We will trace the representations of minority characters in Japanese literature and cinema and also explore the rich diversity of minority voices in the field. Authors include Shimazaki Toson, Sumii Sue, Yu Miri, and the film directors include Sai Yoichi and Hashiguchi Ryosuke. The texts are all in English and films are shown with English subtitles. 6 credits, AL; LA, Not offered in 2010-2011
344. Advanced Writing: Contemporary Prose In this class, students will learn the contemporary styles and forms of casual and formal writing, reports, short essays, etc., while they expand their knowledge of Chinese characters and idiomatic expressions. They will explore various writings with authentic materials. Prerequisite: Japanese 206 or the equivalent. 6 credits, AL; NE, Not offered in 20102011
345. Advanced Reading in Modern Japanese Literature: The Short Story Introduction to modern Japanese short fiction in the original, with exposure to a variety of styles. Some practice in critical analysis and literary translation. Prerequisite: Japanese 206 or the equivalent. 6 credits, $A L ; L A$, Winter-K. Sparling
346. Advanced Reading in Modern Japanese Literature: Poetry and Drama Introduction to the poetry of Takamura Kotaro, Hagiwara Sakutaro, Miyazawa Kenji, and others, plus one contemporary one-act play, to be read and performed; some consideration of the conventions of both genres. Discussion in Japanese. Prerequisite: Japanese 206 or the equivalent. 6 credits, AL; LA, Not offered in 2010-2011
347. Advanced Reading in Contemporary Japanese Prose: Newspapers Introduction to journalistic prose styles, with attention to vocabulary and syntax peculiar to newspapers. Discussion in Japanese. Prerequisite: Japanese 206 or the equivalent. 6 credits, AL; NE, Not offered in 2010-2011
348. Advanced Japanese Conversation and Composition Listening and speaking practice with emphasis on situational context and some attention to aspects of contemporary Japanese culture, using
audiovisual materials. Prerequisite: Japanese 206 or the equivalent. 6 credits, AL; LA, Not offered in 2010-2011
349. Advanced Readings in Contemporary Japanese Prose Reading and discussion of advanced Japanese materials. Exercise in speaking the language and in writing compositions. Prerequisite: Japanese 206 or the equivalent 6 credits, AL; LA, Not offered in 2010-2011
351. Advanced Japanese through Documentary Film In this course we will subtitle in English a Japanese documentary film and also read the script and/or other related materials. The course aims to improve understanding of spoken Japanese at a natural pace, to improve the skill in reading of Japanese texts, and to comprehend some aspects of contemporary Japan. Students are expected to participate actively in the discussion of the film and the subtitles. Prerequisite: Japanese 206 or equivalent. 6 credits, AL; NE, Not offered in 2010-2011
352. Advanced Japanese through Manga and Contemporary Materials Reading and discussion of advanced Japanese materials that include classical and recent manga. The materials are to be determined by both the instructor and the students. Prerequisite: Japanese 206 or the equivalent. 6 credits, $A L ; L A$, Spring-N. Tomonari

## ASIAN STUDIES (ASST)

Director: Professor Kathleen M. Ryor
Committee Members: Arnab Chakladar, Elizabeth Coville, Van Dusenbery, Roy F. Grow, Devashree Gupta, Mark Hansell, Roger R. Jackson, Mariko Kaga, Adeeb Khalid, Brendan LaRocque, Burton Levin, Tun Myint, Melinda Russell, Kathleen M. Ryor, Asuka Sango, Meera Sehgal, Shana Sippy, Kathryn W. Sparling, Lan Liana Tan, Noboru Tomonari, Nancy C. Wilkie, Seungjoo Yoon, Hong Zeng, Qiguang Zhao

Founded in 1964, the program in Asian Studies is administered by a committee of faculty drawn from multiple departments. It involves a wide variety of courses and activities aimed at enhancing appreciation and understanding of the art, life, and thought of the cultures of Asia, past and present. We concentrate on three regions: East Asia (China, Japan, Korea, Vietnam), South Asia (Afghanistan, Bangladesh, Bhutan, India, Myanmar, Nepal, Pakistan, Sri Lanka, and Tibet), and Central Asia (Afghanistan, Bhutan, Iran, the Islamic former Soviet republics, Manchuria, inner and outer Mongolia, Tibet, Xinjiang). The program consists of courses on Asia in nine departments, extracurricular events on campus, and off-campus studies. An interdisciplinary, regionally-focused major in Asian Studies is offered, which is especially suitable for students with an overriding interest in one or more regions of Asia whose academic needs cannot be met by majoring in a disciplinary base. Students who do major in disciplinary base departments may concentrate in East Asian Studies or South Asian Studies.

## Requirements for a Major

A total of 66 credits:
I. 18 credits in a disciplinary based department: Art History, Asian Languages, History, Political Science/International Relations, Religion, and Sociology and Anthropology which must include:
a) at least 12 credits in courses related to Asia
b) 6 credits in an appropriate methodology course:

ARTH 298 Seminar for Art History Majors
CAMS 330 Cinema Studies Topics Seminar
HIST 298 Junior-year History Colloquium
LCST 245 Introduction to Critical Methods: Structure, Gender, Culture

POSC 230 Methods of Political Research
RELG 300 Issues in the Study of Religion
SOAN 330 Sociological Thought and Theory
SOAN 331 Anthropological Thought and Theory
II. 42 additional credits in Asia-related courses (including appropriate off-campus credits, excluding ASST 400 and language-department courses below 228 or their equivalents); these must include:
a) at least 6 credits in each of three distribution areas: Arts and Literature, Humanities, Social Sciences
b) a maximum of 18 credits at the 100 level
c) a minimum of 24 credits at the 200 level or above
III. 6 credits of Senior Integrative Exercise (ASST 400), normally taken during winter term of the senior year.

The Senior Integrative Exercise, normally is a research paper of 30 pages or more that delves into some aspect of the student's focal region. The project normally is developed by the student during the fall term, and proposed to, and approved by the Asian Studies Committee, which assigns two faculty members as readers and advisers for the project. The first draft of the exercise is due by the end of the ninth week of winter term, and a final draft by the end of the fourth week of spring term. The student defends the project before the two readers, and presents the research publicly to interested members of the community.
IV. A regional focus: East Asia (China, Japan, Korea, Vietnam), South Asia (Afghanistan, Bangladesh, Bhutan, India, Myanmar, Nepal, Pakistan, Sri Lanka, Tibet), or Central Asia (Afghanistan, Bhutan, Iran, the Islamic former Soviet republics, Manchuria, inner and outer Mongolia, Tibet, Xinjiang) involving:
a) at least 48 credits (exclusive of the Senior Integrative Exercise) related to one's focal region
b) at least 6 credits related to an Asian region different from one's focal region.

Courses by regional focus, subdivided by distribution area:

## EAST ASIA:

ARTH 164 Buddhist Art (Not offered in 2010-2011)
ARTH 165 Japanese Art and Culture (Not offered in 2010-2011)
ARTH 166 Chinese Art and Culture
ARTH 209 Chinese Painting
ARTH 220 Gender and Genre in the Floating World: Japanese Prints (Not offered in 2010-2011)
ARTH 320 Japanese Theater: Visualizing Narrative Across Media
ASLN 111 Writing Systems
ASLN 237 Tao of Wisdom in Asian Literature (Not offered in 2010-2011)
ASLN 260 Historical Linguistics (Not offered in 2010-2011)
CHIN 115 The Taoist Way of Health and Longevity: Taichi and Other Forms (Not offered in 20102011)

CHIN 212 Chinese Studies Seminar in Tianjin: Chinese Culture
CHIN 235 Beauty, Good, and Evil in Chinese Literature in Translation (Not offered in 2010-2011)
CHIN 240 Chinese Cinema (Not offered in 2010-2011)
CHIN 241 Twentieth Century Chinese Literature and Film in Translation
CHIN 248 The Structure of Chinese (Not offered in 2010-2011)
CHIN 282 Chinese Studies Seminar in Tianjin: Chinese Civilization
CHIN 307 Chinese Studies Seminar in Tianjin: Advanced Chinese Language
CHIN 347 Advanced Readings in Contemporary Chinese Prose: Newspapers (Not offered in 20102011)

CHIN 348 Advanced Chinese: The Mass Media

CHIN 349 Advanced Chinese: Social Commentary (Not offered in 2010-2011)
CHIN 350 Advanced Chinese: Poems and Stories (Not offered in 2010-2011)
CHIN 355 Contemporary Chinese Short Stories and Films (Not offered in 2010-2011)
CHIN 356 Modern and Contemporary Women Writers (Not offered in 2010-2011)
CHIN 357 Advanced Chinese: Contemporary Social Issues
CHIN 358 Chinese Idiom Stories (Not offered in 2010-2011)
CHIN 360 Classical Chinese (Not offered in 2010-2011)
ECON 240 Microeconomics of Development
HIST 151 History of Modern Japan (Not offered in 2010-2011)
HIST 152 History of Imperial China
HIST 153 History of Modern China
HIST 200 The Zen of Asian and Western Woodworking (Not offered in 2010-2011)
HIST 254 Colonialism in East Asia
HIST 255 Press and Culture in East Asia
JAPN 230 Topics in Pre-Modern Literature in Translation (Not offered in 2010-2011)
JAPN 231 Japanese Cinema in Translation (Not offered in 2010-2011)
JAPN 232 Autobiography in Modern Japan in Translation (Not offered in 2010-2011)
JAPN 234 Modern Japanese Novel in Translation: Mothers/Daughters; Fathers/Sons (Not offered in 2010-2011)
JAPN 236 Classical Japanese Fiction: The Tale of Genji and Its World in Translation
JAPN 237 Literature and Arts of Japan: 1333-1868 in Translation (Not offered in 2010-2011)
JAPN 240 Literature and Society of Modern Japan in Translation
JAPN 243 The Other in Modern Japanese Literature and Society in Translation (Not offered in 2010-2011)
JAPN 345 Advanced Reading in Modern Japanese Literature: The Short Story
JAPN 346 Advanced Reading in Modern Japanese Literature: Poetry and Drama (Not offered in 2010-2011)
JAPN 347 Advanced Reading in Contemporary Japanese Prose: Newspapers (Not offered in 20102011)

JAPN 348 Advanced Japanese Conversation and Composition (Not offered in 2010-2011)
JAPN 349 Advanced Readings in Contemporary Japanese Prose (Not offered in 2010-2011)
JAPN 351 Advanced Japanese through Documentary Film (Not offered in 2010-2011)
JAPN 352 Advanced Japanese through Manga and Contemporary Materials
LING 170 Linguistics of the Japanese Writing System (Not offered in 2010-2011)
LING 180 The Structure of Japanese (Not offered in 2010-2011)
MUSC 182 Chinese Musical Instruments
MUSC 182J Chinese Musical Instruments (Juried)
MUSC 282 Chinese Musical Instruments
POSC 170 International Relations and World Politics
POSC 237 Southeast Asian Politics (Not offered in 2010-2011)
POSC 239 The Diplomat's Craft: Three Case Studies (Not offered in 2010-2011)
POSC 241 Ethnic Conflict
POSC 326 America's China Policy*
POSC 329 Vietnam, Iraq, and American Policy* (Not offered in 2010-2011)
POSC 345 Guerillas, Warlords and Bandits: The Art of Asymmetric War* (Not offered in 20102011)

POSC 378 Beijing Program: Chinese Social and Political Institutions (Not offered in 2010-2011)
POSC 379 Beijing Program: Chinese Decision Making (Not offered in 2010-2011)
POSC 381 Beijing Program: Politics of Economic Development (Not offered in 2010-2011)
POSC 382 Beijing Program: Chinese Economics in Transition (Not offered in 2010-2011)

RELG 151 Religions in Chinese Culture
RELG 152 Religions in Japanese Culture (Not offered in 2010-2011)
RELG 254 Zen Buddhism
RELG 255 Social Engagement in Asian Religions (Not offered in 2010-2011)
RELG 258 Women and Buddhism (Not offered in 2010-2011)
RELG 350 Emptiness
RELG 358 Zen, Nationalism, and Orientalism (Not offered in 2010-2011)
SOAN 284 Anthropology of China (Not offered in 2010-2011)
SOAN 286 Anthropology of East Asia (Not offered in 2010-2011)

## SOUTH ASIA:

ARTH 164 Buddhist Art (Not offered in 2010-2011)
CCST 210 Global/Local Perspectives
ECON 240 Microeconomics of Development
ENGL 250 Modern Indian Fiction (Not offered in 2010-2011)
ENGL 251 Contemporary Indian Fiction
HIST 160 History of Classical India (Not offered in 2010-2011)
HIST 161 History of Modern India (Not offered in 2010-2011)
HIST 167 History of Modern South Asia
HIST 259 Women in South Asia: Histories, Narratives, and Representation (Not offered in 20102011)

HIST 262 Post-colonial South Asia, 1947-Present (Not offered in 2010-2011)
HIST 266 History of Islam in India
MUSC 180 Raga: Vocal or Instrumental Study of Hindustani Music
MUSC 180J Raga: Vocal or Instrumental Study of Hindustani Music
MUSC 181 Sitar
MUSC 248 Music of India (Not offered in 2010-2011)
MUSC 280 Raga: Vocal or Instrumental Study of Hindustani Music
MUSC 281 Sitar
POSC 170 International Relations and World Politics
POSC 241 Ethnic Conflict
POSC 247 Comparative Nationalism
RELG 122 Introduction to Islam
RELG 123 Muhammad and the Qur'an (Not offered in 2010-2011)
RELG 150 Religions of South Asia
RELG 163 The Qur'an (Not offered in 2010-2011)
RELG 251 Theravada Buddhism (Not offered in 2010-2011)
RELG 253 Tibetan Buddhism
RELG 257 Buddha (Not offered in 2010-2011)
RELG 261 Beyond Hindu and Muslim: The Lives of Indian Saints (Not offered in 2010-2011)
RELG 350 Emptiness
RELG 353 Hindu Hierarchies: Caste in Theory and Practice (Not offered in 2010-2011)
RELG 356 Buddhism and Ecology (Not offered in 2010-2011)
SOAN 157 Culture and Politics in India
SOAN 257 Culture and Politics in India (Not offered in 2010-2011)

## CENTRAL ASIA:

ECON 240 Microeconomics of Development
HIST 254 Colonialism in East Asia
HIST 265 Central Asia in the Modern Age (Not offered in 2010-2011)
HIST 360 Muslims and Modernity (Not offered in 2010-2011)

RELG 122 Introduction to Islam
RELG 123 Muhammad and the Qur'an (Not offered in 2010-2011)
RELG 253 Tibetan Buddhism
RELG 263 Sufism
SOAN 256 Ethnography of Africa (Not offered in 2010-2011)
SOAN 284 Anthropology of China (Not offered in 2010-2011)

## V. One year of study of an appropriate Asian language, or its equivalent

For languages offered at Carleton, this will involve completion of a language through 103, or its equivalent. For languages not offered at Carleton, which may be studied through off-campus programs, summer study, or special arrangement at Carleton, it will involve completion of the equivalent of 103. Language (as opposed to literature) courses below 228 may not be applied to the major. The following courses do not count towards the 66 credits needed for the Asian Studies major.

CHIN 101, 102, 103 Elementary Chinese
CHIN 204, 205 Intermediate Chinese
CHIN 206 Chinese in Cultural Context
CHIN 207 Chinese Studies Seminar in Tianjin: Intermediate Chinese Language
JAPN 101, 102, 103 Elementary Japanese
JAPN 204, 205, 206 Intermediate Japanese
Languages available at Carleton through special arrangement may include: Uzbek (A. Khalid); Sanskrit, Pali, and Classical Tibetan (R. Jackson).
VI) Normally, at least one term of off-campus study in Asia Students interested in studying in Asia may apply to one of a number of overseas programs. Carleton cooperates with several other colleges to sponsor the Associated Kyoto Program, which takes 50 students and seven faculty members to Japan for an academic year. Carleton also participates in a one-year program at Waseda University sponsored by the Associated Colleges of the Midwest (ACM). The ACM Program in India consists of five months stay in Pune, where students study Marathi, take academic courses centered on India, and investigate an independent study topic. The program in Hong Kong at the Chinese University, also for students from ACM institutions, normally lasts one year, though a semester-long program is also possible. The Carleton Chinese Studies Seminar in Tianjin is a Chinese language and culture program at Nankai University. Students take courses in Chinese languages, civilization and society and culture including art, Taichi and other martial arts. Carleton, Bates, Bowdoin, Colby, Swarthmore, Grinnell, Holy Cross, and Whitman jointly sponsor the Intercollegiate Sri Lanka Education Program (ISLE), in which students and a faculty member study at the University of Peradeniya near Kandy, the old capital in the middle of the island. A triennial program emphasizing Political Economy was begun in 1990, in Beijing, China. Opportunities to study in Asia also are available through a variety of non-Carleton programs.

Courses taken on off-campus programs may be applied to the major. Because of the paucity of Carleton courses in South Asian languages or on many aspects of Central Asia, off-campus programs generally form an important component of the major for those who focus in those two Asian regions.

## ASTRONOMY

See Physics and Astronomy

## BIOCHEMISTRY CONCENTRATION

Director: Associate Professor Joseph Walter Chihade
The biochemistry program at Carleton rests on the close cooperation between the departments of

Biology and Chemistry. Emerging as a recognized discipline early in the last century, biochemistry has grown into a vast subject that spans several established disciplines. It serves as the link between the fields of chemistry and biology, and even as it flourishes at the interface of these subjects, it holds a strong position within the two traditional disciplines. Fundamentally, biochemistry seeks to establish an understanding of biological phenomena at a molecular level.

## Requirements for the Concentration

The biochemistry concentration requirements reflect the fundamental importance of the intellectual tools and structures of biology and chemistry to the study of all issues in biochemistry, and we ask students to get a grounding in both disciplines. It is likely that many students enrolling in the concentration will major in either biology or chemistry. To encourage breadth within the concentration, no more than five six-credit courses from a student's own major may be counted toward the minimum requirements of the concentration.

Both the biology and chemistry departments maintain vigorous weekly seminar programs, regularly bringing to the college distinguished scientists, including many biochemists. Each concentrator should make it a priority to attend relevant seminars whenever possible. At the beginning of each term, concentrators will be notified of the pertinent biology and chemistry seminars held that term.

Finally, both the chemistry and biology departments regularly offer integrative exercise experiences in biochemistry as an option for their majors. Concentrators who are biology or chemistry majors have the option of furthering their pursuit of biochemistry through a biochemical topic as the basis for their senior integrative exercise.

## Course Requirements

BIOL 125 Genes, Evolution, and Development
BIOL 126 Energy Flow in Biological Systems
BIOL 380 Biochemistry
BIOL 381 Biochemistry Laboratory or CHEM 321 Biological Chemistry Laboratory (Not offered in 2010-2011)
CHEM 123 or 128 Principles of Chemistry or Principles of Environmental Chemistry, respectively
CHEM 230 Equilibrium and Analysis
CHEM 233 Organic Chemistry I
CHEM 234 Organic Chemistry II
CHEM 320 Biological Chemistry
CHEM 321 Biological Chemistry Laboratory or BIOL 381 Biochemistry Laboratory (Not offered in 2010-2011)

## Upper Level Course Electives

(one course and one 2-credit laboratory are required):
BIOL 310 Immunology
BIOL 311 Immunology Laboratory (Not offered in 2010-2011)
BIOL 330 Methods in Molecular Biophysics (Not offered in 2010-2011)
BIOL 382 Molecular Biology (Not offered in 2010-2011)
BIOL 383 Molecular Biology Laboratory (Not offered in 2010-2011)
BIOL 384 Oncogenes and the Molecular Biology of Cancer (Not offered in 2010-2011)
BIOL 388 Molecular Mechanisms of Drug Action (Not offered in 2010-2011)
CHEM 301 Chemical Kinetics Laboratory
CHEM 343 Chemical Thermodynamics
CHEM 350 Chemical and Biosynthesis (Not offered in 2010-2011)
CHEM 360 Chemical Biology (Not offered in 2010-2011)

## Other relevant courses

The college offers a number of related courses that would enhance the background of a biochemistry concentrator. The following courses are not part of the concentration, but do support the program. In particular, we strongly encourage interested students to enroll in BIOL 240, Genetics.

BIOL 234 Microbiology with laboratory
BIOL 240 Genetics
BIOL 280 Cell Biology
PSYC 318 Psychopharmacology

## BIOLOGY (BIOL)

Chair: Associate Professor Debby Rae Walser-Kuntz<br>Professors: Fernán Jaramillo, Mark McKone, Susan R. Singer, John L. Tymoczko, Stephan G. Zweifel

Visiting Professor: Charles E. Crutchfield, III
Associate Professors: Matthew S. Rand, Debby Rae Walser-Kuntz
Assistant Professors: Marsha Nidanie Henderson, Daniel Luis Hernández, Raka Mustaphi
Mitra, Jennifer Ross Wolff
Senior Lecturer: David J. Hougen-Eitzman
Lecturer: Sarah Deel
Potential biology majors should select a sequence of courses that will acquaint them with the variety of organisms, and their molecular and cellular structure, physiology, heredity, development, evolution, and ecological interactions. Biologists pursue courses in teaching at the college or high school level, biological research, study in the medical sciences, work in environmental sciences, or work in numerous commercial and industrial areas. This program of study will also serve students interested in biology for purposes of general education.

## Requirements for a Major

Ten courses are required within the department.

1. Biology 125 and 126 (majors are required to complete both introductory courses, with a grade of "C-" or better before taking any other courses in the department)
2. One course from each of the following groups including their laboratories where listed separately:
a. Molecular and Cell Biology (240/241, 278, 280/281, 310/311, 380/381, 382/383, 384)
b. Organismic Biology (Biology 232/233, 234, 236, 238/239, 242/243, 252/253, 342/343, 344, 376/377, 386/387)
c. Ecology and Evolutionary Biology (Biology 221/222, 350, 352/353, 361/362, 374)
3. Three electives, which may include a six-credit independent study, a junior/senior seminar, or any of the courses listed above. If you choose a course for an elective that offers a laboratory section, then the lab must be taken in order for the course to count toward the major.
4. One course must emphasize data interpretation and analysis of the primary literature. Courses that fulfill this include Biology 344, 361/362, 368, 370, 374, 376, 377, 379, 382/383, 384, 385, 386.
5. Critical Reading and Analysis of Primary Literature (Biology 399).
6. Integrative Exercise (Biology 400 two terms).

Laboratory work is an integral part of most biology courses. In courses in which registration for the laboratory is separable from the lecture portion of the course, all biology majors are required to register concurrently for laboratory and lecture in order for these courses to count toward requirements for the major. No course taken at another school may be used to meet the requirements for the major without prior approval of the Biology faculty.

Because of the close interrelationship of Biology to other sciences, supporting work in other areas is necessary. The minimum requirement includes 1) Physics: One five-week Newtonian mechanics course, 131, 132, 141, or 142, and one of the following five-week courses: $151,152,153,161$, or 162 ; or Mathematics 215; and 2) Chemistry 123 or 128 ; and 3) Chemistry 230 or 233. The need for additional courses in allied sciences and mathematics will vary with the professional plans of the student.

## The Introductory Sequence

The introductory Biology sequence consists of two courses, Biology 125 and 126. The two courses can be taken in either order. Both courses are required before any further upper-level course work in Biology, with one exception. Students who received a score of "5" on the AP exam or a score of "6" or "7" on the IB exam may elect not to take Biology 125. In this case Biology 126 is the only required introductory course. There are two versions of Biology 125 from which to choose, and students are urged to make a thoughtful choice of the proper offering for their background.

In the fall term, a section of Biology 125 is offered "with in-class problem solving." This offering is appropriate for students who 1) have not taken AP, IB, or Honors Biology, 2) do not feel confident in their high school preparation for college biology, or 3) do not have a strong chemistry background from either high school or college. Students who take Biology 125 in the fall could then go on to take Biology 126 in either the winter or spring terms of the same year.

The other fall term section of Biology 125 will be offered for first-year students who are enrolled in the Dyad program (See Cognitive Science). This offering of Biology 125 is intended for students who meet the criteria for winter term biology 125.

The winter term offering of Biology 125 is designed for students who 1) earned a score of 3 or higher in AP Biology, 2) earned a score of 5 or higher in IB Biology, or 3) earned a grade of B or higher in Honors or Advanced Biology in high school. In addition, these students are expected to have mastered basic concepts of chemistry in either a high school or college chemistry course. These same criteria would apply to any students who would like to take Biology 126 before taking Biology 125 .

## Biology Courses

101. Human Reproduction and Sexuality The myths surrounding human reproduction and sexuality may out weigh our collective knowledge and understanding. This course will review the basic biology of all aspects of reproduction--from genes to behavior--in an attempt to better understand one of the more basic and important processes in nature. Topics will vary widely and will be generated in part by student interest. A sample of topics might include: hormones, PMS, fertilization, pregnancy, arousal, attraction, the evolution of the orgasm, and the biology of sexuality. 6 credits, MS; NE, QRE, Offered in alternate years, Winter-M. Rand
102. Bioethics We often base our decisions on perceived standards of right and wrong and the consequences of alternative outcomes. How important is scientific literacy in debates regarding the health of individuals, populations, or species? Some argue that many biomedical and environmental decisions require consideration of information produced by solid scientific reasoning. Topics may include: cloning and stem cell research, genetic testing, science and public policy, scientific integrity, animal use in research, and xenotransplantation. 6 credits, MS; NE, Not offered in 2010-2011
103. Biotechnology, Health, and Society An introduction to basic biological principles underlying biotechnology and its potential therapeutic applications. Topics will include stem cells, cloning, gene therapy, genetic testing, and the human genome project. Discussions will emphasize critical analysis of biotechnological information presented in the popular press and other media, as well as ethical and legal considerations related to biotechnology research and its applications. Does not count toward the Biology major. 6 credits, MS; NE, Not offered in 2010-2011
104. Genes, Evolution, and Development Emphasizes the role of genetic information in biological systems. Under this theme, we cover subjects from the molecular to the population levels of organization. Topics include the nature of inheritance and life cycles, structure/function of DNA, gene expression and regulation, the changing genetic makeup of species as they evolve, and the development of individual organisms from zygotes. 6 credits, MS; LS, QRE, Fall, Winter-M. McKone, S. Singer, S. Zweifel
105. Genes, Evolution, and Development: A Problem-solving Approach This offering of Biology 125 offers a problem solving approach and covers the same concepts as other versions of Biology 125. The course format allows time in class to apply new concepts by working through case study type problems with faculty present. Students enter Carleton from a wide variety of academic experiences, and this offering of Biology 125 is designed to provide a level playing field for students regardless of previous science background. In addition, the active learning component of the course is beneficial for students who like to learn by doing. Students who complete this course are well-prepared to continue on to Biology 126. 6 credits, MS; LS, QRE, Fall-D. Walser-Kuntz, S. Singer
106. Energy Flow in Biological Systems Follows the pathways through which energy and matter are acquired, stored, and utilized within cells, organisms, and ecosystems. The focus moves among the different levels of organization from protein function to nutrient movement through ecosystems. 6 credits, MS; LS, QRE, Winter, Spring-R. Mitra, M. Henderson, D. Hernandez, J. Tymoczko, M. Rand
107. Global Change Biology Environmental problems are caused by a complex mix of physical, biological, social, economic, political, and technological factors. This course explores how these environmental problems affect life on Earth by examining the biological processes underlying natural ecological systems and the effects of global environmental changes such as resource consumption and overharvesting, land-use change, climate warming, pollution, extinction and biodiversity loss, and invasive species. Prerequisite: One introductory science lab course (Biology 125, 126, Chemistry 123, 128, Geology 110 or 120). 6 credits, MS; NE, QRE, Winter-D. Hernandez
108. Australia Program: Biology Field Studies and Research Designed to complement Biology 250, the course teaches methods and approaches to the analysis of biological problems with emphasis on an ecological viewpoint. We will be studying animals and plants in both terrestrial and marine habitats, with a particular focus on the behavioral ecology of animals. 6 credits, MS; NE, QRE, Not offered in 2010-2011
109. Ecosystem Ecology This course examines major ecosystems on Earth, including terrestrial, wetland, lake, river, estuarine, and marine systems. Topics include the two major themes of energy flow and production and decomposition, microbial ecology and nutrient transformations, element cycles, ecosystems as a component of the Earth System, and global change. Current applied issues are emphasized as case studies, including clear cutting, rising atmospheric $\mathrm{CO}_{2}$, eutrophication of aquatic systems, acid rain, wetland delineation, and biodiversity effects on ecosystems. Prerequisite: Biology 126 and one of the following: Biology 125, Geology 110, Chemistry 123 or 128.6 credits, MS, WR; NE, WR2, QRE, Fall-D. Hernandez

## 222. Ecosystem Ecology Laboratory 2 credits, ND; NE, Fall-D. Hernandez

230. Introduction to Pharmacology This course provides an introduction to how drugs work in the body. We will discuss overarching ideas, such as the clinical uses of drugs, as well as specific pharmacological principles, including pharmaceutical administration, distribution, metabolism, and excretion. Since most drugs provide adverse as well as therapeutic effects, aspects of toxicology and drug design will be described. Students interested in clinical medicine, basic research, or pharmaceutical design will get a basic foundation to the action of therapeutic drugs, which will enhance subsequent advanced study. Prerequisite: Biology 125, 126, Chemistry 233, 234 (may be taken concurrently). 6
231. Human Physiology Human Physiology seeks to understand the fundamental mechanisms responsible for the diverse functions of the body. Course topics include the function and regulation of the various physiological systems (nervous, circulatory, endocrine, excretory, respiratory, digestive, etc.), biochemistry, cellular physiology, homeostasis and acid-base chemistry. The study of human physiology provides the principle groundwork for internal medicine, pharmacology, and other related health fields. The laboratory includes a variety of experiments focusing on the function and regulation of the human body. Prerequisites: Biology 125 and 126. 6 credits, MS; NE, QRE, Winter-F. Jaramillo

## 233. Human Physiology Laboratory 2 credits, $N D$; NE, Winter— $\boldsymbol{F}$. Jaramillo

234. Microbiology with Laboratory A study of the metabolism, genetics, structure, and function of microorganisms. While presented in the framework of the concepts of cellular and molecular biology, the emphasis will be on the uniqueness and diversity of the microbial world. The course integrates lecture and laboratory, and will fulfill requirements of a microbiology course with lab for veterinary or pharmacy schools. Prerequisite: Biology 125 and 126.6 credits, $M S$; LS, QRE, Offered in alternate years, Spring—D. Walser-Kuntz
235. Plant Biology An exploration of structure-function relationships in plants. This course is framed in the context of advances in evolution and genomics, which offer insight into physiological, developmental, morphological, and anatomical adaptations to diverse environments. The biology behind current issues, including genetically modified organisms, will be investigated. Emphasis is placed on experimental approaches to the studies of plants. Prerequisites: Biology 125 and 126.6 credits, $M S$; $N E$, QRE, Spring-S. Singer
236. Entomology Insects are one of the most successful groups of organisms on the planet, playing major roles in all terrestrial and freshwater ecosystems. In addition, since insects are ubiquitous they affect human endeavors on many fronts, both positively (e.g., crop pollination) and negatively (damage to crops and transmitting disease). This class will focus on the biology of insects, including physiology, behavior, and ecology. Many examples will highlight current environmental issues. Prerequisites: Biology 125 and 126. Concurrent registration in Biology 239 required. 6 credits, MS; NE, QRE, Offered in alternate years, Fall-D. Hougen-Eitzman
237. Entomology Laboratory Field and laboratory investigation of living insects. Synoptic examination of the major orders of insects, including evolution of different groups, physiology, structure, and identification. Field labs will focus on insect ecology and collection techniques for making a comprehensive insect collection. 2 credits, ND; NE, Offered in alternate years, Fall-D. HougenEitzman
238. Genetics A study of the transmission of genetic information between generations of organisms, and of the mechanism of expression of information within an individual organism. The main emphasis will be on the physical and chemical basis of heredity; mutational, transmissional and functional analysis of the genetic material, and gene expression. Prerequisites: Biology 125 and 126 or permission of the instructor. 6 credits, MS; NE, QRE, Winter, Spring-S. Singer, S. Zweifel
239. Genetics Laboratory 2 credits, ND, Winter, Spring—S. Singer, S. Zweifel
240. Vertebrate Morphology Over 500 million years of evolution has produced a rich diversity of structure and functional morphology in vertebrates. We will use comparative methods to help us understand the various selective forces and constraints that produced the vertebrate forms living today. Laboratory dissection of a variety of preserved vertebrates will allow us to examine how these fascinating animals monitor and move through their environment, procure, ingest and circulate nutrients, respirate, and reproduce. Prerequisites: Biology 125 and 126.6 credits, $M S$; NE, Spring-M. Rand

## 243. Vertebrate Morphology Laboratory 2 credits, ND; NE, Spring—M. Rand

248. Behavioral Ecology Behavioral ecologists strive to understand the complex ways that ecological pressures influence the evolution of behavioral strategies. It can be argued that animals face a relatively small set of basic challenges: they must acquire food, water, and mates, and they must avoid danger. Yet we see a rich diversity of solutions to these problems. Consider foraging behavior, for example. All animals must acquire energy, but some filter particles out of sea water, others graze on nearly inedible grasses, while still others hunt in cooperative packs. In this course we will consider such topics as foraging, communication, sociality, and conflict. By focusing on the functions and evolutionary histories of behaviors, we strive to better understand the puzzle of behavioral diversity. Prerequisite: Biology 125 and 126. credits, MS; NE, QRE, Not offered in 2010-2011
249. Australia Program: Marine Biology We will study the biology of marine ecosystems with an emphasis on population and community ecology and the life histories and evolution of marine organisms. We will explore the diverse marine ecosystems of Australia through extensive field work in habitats including temperate oceans, mangrove forests, and tropical coral reefs. 6 credits, $M S$; $N E, Q R E$, Not offered in 2010-2011
250. Environmental Animal Physiology This course explores the physiological adaptations animals employ to survive in a wide variety of environments. Animals maintain physiological functions in the face of environmental extremes in heat, cold, aridity, deep ocean pressure, salinity, and the lack of oxygen in water or at high altitude, to name a few. An organism's ability to cope with environmental extremes has a large impact on the geographic distribution of many species. Associated laboratory will emphasize experimentation and application of physiological concepts in living organisms. Prerequisites: Biology 125 and 126. 6 credits, MS; NE, QRE, Fall-M. Rand

## 253. Environmental Animal Physiology Laboratory 2 credits, ND; NE, Fall—M. Rand

255. Australia Program: Culture and Environment in Australia We will consider both the natural history of the Australian landscape and the cultural history of the people who have settled there. We will use readings, writing exercises, meetings with visiting lecturers, and visits to cultural centers. 2 credits, S/CR/NC, ND; NE, Not offered in 2010-2011
256. Visiting Speakers Seminar Meets up to once per week for all three terms. Research presentations by distinguished visiting scholars in various areas of biology. Credit awarded during spring term after attendance of two-thirds of all the presentations. Not open to senior majors. 1 credit for all three terms, S/CR/NC, ND; NE, Fall, Winter, Spring—Staff
257. Introduction to Biochemistry This course presents an overview of the biochemical aspects of energy and information metabolism. This course is intended to provide students with the fundamental biochemical knowledge to support their further studies in biology. Questions such as the following are addressed: What defines a good fuel? How are metabolic pathways constructed and made to occur at rates sufficient to support life? Interwoven throughout the discussion of energy will be consideration of information processing. How do molecules recognize one another? How is the complex metabolic web of the cell regulated? How does this regulation change in response to signals such as hormones or environmental conditions, and to conditions such as exercise, starvation, alcohol consumption or disease states? This course does not fulfill requirements for the Biochemistry concentration. Prerequisites: Biology 125 and 126, Chemistry 123 or 128.6 credits, MS; NE, QRE, Spring—J. Tymoczko
258. Cell Biology An examination of the structures and processes that underlie the life of cells, both prokaryotic and eukaryotic. Topics to be covered include energy capture, storage, and utilization; cellular reproduction; organelles, membranes, and other cellular components; and cell-cell communication. Concurrent registration in Biology 281 required. Prerequisites: Biology 125 and 126.6 credits, MS; NE, QRE, Fall-R. Mitra
259. Cell Biology Laboratory The focus of the laboratory will be on current techniques used to study cellular structure and function. Concurrent registration in Biology 280 required. 2 credits, $N D ; N E$, Fall-R. Mitra
260. Immunology This course will examine the role of the immune system in defense, allergic reactions, and autoimmunity. Topics to be covered include the structure and function of antibodies, cytokines, the role of the major histocompatibility complex in antigen presentation, cellular immunity, immunodeficiencies, and current techniques used to study immune responses. Prerequisites: Biology 125 and 126. 6 credits, MS; NE, QRE, Winter-D. Walser-Kuntz

## 311. Immunology Laboratory 2 credits, $N D$; $N E$, Winter-D. Walser-Kuntz

342. Animal Developmental Biology An analysis of animal development from fertilization to the establishment of the adult body form. Lectures and discussions will examine the key processes of animal embryogenesis, as well as the molecular and cellular mechanisms that control these developmental processes. Prerequisites: Biology 125 and 126. Biology 240 strongly recommended. 6 credits, $M S$; $N E$, QRE, Not offered in 2010-2011 - J. Wolff
343. Animal Developmental Biology Laboratory Laboratory will introduce descriptive and experimental embryological techniques using a variety of model organisms. 2 credits, $N D$; NE, Not offered in 2010-2011-J. Wolff
344. Plant Development A study of the development of vascular plants. Topics including embryogenesis, meristem function, leaf morphogenesis, and reproduction will be investigated through the analysis of primary literature. Emphasis will be placed on the experimental basis for current concepts in plant development ranging from molecular mechanisms to evolution of developmental pathways. Prerequisites: Biology 125 and 126. 6 credits, MS; NE, QRE, Not offered in 2010-2011
345. Evolution Principles and history of evolutionary change in wild populations, with consideration of both microevolutionary and macroevolutionary time scales. Topics covered include causes of change in gene frequency, the nature of adaptation, constraints on evolutionary change, the evolution of genes and proteins, rates of speciation and extinction, and the major events in evolutionary history. Prerequisites: Biology 125 and 126. 6 credits, MS; NE, QRE, Fall-M. McKone
346. Population Ecology An investigation of the properties of populations and communities. Topics include population growth and regulation, life tables, interspecific and intraspecific competition, predation, parasitism, mutualism, the nature of communities, and biogeography. Prerequisites: Biology 125 and 126; Mathematics 111 or other previous calculus course. Recommended course: Mathematics 215 or equivalent exposure to statistical analysis. Concurrent registration in Biology 353 required. 6 credits, MS; NE, QRE, Spring-M. McKone

## 353. Population Ecology Laboratory 2 credits, ND; NE, Spring—M. McKone

354. Human Cutaneous Biology The course will cover the cellular and molecular biology of human skin in its normal and diseased states as it relates to a clinical presentation. Clinical dermatology and pathology will also be reviewed. The course style will be patterned along the lines as if it were a medical school course. Additionally, students will be introduced to many aspects of successfully negotiating medical school including introductions and possible "field trips" to the Mayo Clinic Medical School and/or University of Minnesota Medical School(s). Prerequisites: Chemistry 233 and two upper division Biology courses ( 200 or 300 -level) and instructor's permission required. 3 credits, $S / C R / N C, N D ; N E$, Spring-C. Crutchfield
355. Seminar in Biophysics Biophysical methods are important tools for understanding biology. The biophysical characterization of proteins is accelerating drug discovery in diseases such as Alzheimer's, cystic fibrosis, mad cow, inherited emphysema, and many cancers. Because biophysics relies on the
principles of physics to look at biological problems at the molecular level, students majoring in biology, physics, and chemistry often feel unprepared to explore this interdisciplinary subject. This seminar will provide upper-level students, in each of these fields, the background to critically analyze the biophysical results that permeate the literature and the opportunity to apply knowledge in their major, across disciplines. Prerequisite: Introductory Biology series, or Introductory Chemistry series, or Introductory Physics series, or permission from instructor. 6 credits, MS; NE, QRE, Winter-N. Henderson
356. Tropical Rainforest Ecology The tropical rainforests contain most of the earth's species, but have been less studied than many other biological communities. Recently there has been a dramatic increase in ecological investigations in the tropics, and the goal of this course is to survey the most contemporary and influential published work in rainforest ecology. Topics to be emphasized include the latitudinal gradient in species diversity, evolutionary ecology, and interactions between species. This course is part of the off-campus winter break program, involving two linked courses in fall and winter; this class is the first class in the sequence. Prerequisites: Biology 352 or other ecology course work and permission of the instructor. 6 credits, MS; NE, Fall—M. McKone
357. Field Investigation in Tropical Rainforest Ecology This course is the second part of a two-term sequence beginning with Biology 361. This course begins with a two-week visit in December to the La Selva Biological Station near Puerto Viejo, Costa Rica. The station is located in lowland rainforest and has been the site of many important ecological experiments. While at La Selva, the class will perform extensive field experiments planned during Biology 361. In regular meetings during the term, data will be analyzed and presented in oral and written reports. Prerequisites: Biology 361 and permission of the instructor. Does not count toward the Biology major. 6 credits, MS; NE, Winter—M. McKone
358. Neurological Diseases and Disorders: Behind the Scenes Brain dysfunction is a common topic of cinematic presentation, a media form that reaches a broader audience than the newspaper science section or top biomedical research journal. But are such representations accurate? This seminar course will use primary scientific literature to understand the clinical, physiological, and molecular characterizations, including utilization of animal models and current treatment strategies, of common neurodegenerative diseases and neurological disorders such as Alzheimer's disease, Parkinson's disease, schizophrenia, traumatic brain injury, autism, and addiction. In parallel, participants will view mainstream movies depicting such diseases/disorders to determine fact from artistic license. Prerequisites: Biology 125 and 126. 6 credits, MS; NE, QRE, Not offered in 2010-2011
359. Topics in Neuroscience We will focus on recent advances in neuroscience. All areas of neuroscience (cellular/molecular, developmental, systems, cognitive, and disease) will be considered. Classical or foundational papers will be used to provide background. Prerequisites: Biology 125 and 126.6 credits, MS; NE, QRE, Fall-F. Jaramillo
360. The Metabolic Basis of Disease The course will examine the biochemical basis of human diseases. Although the focus will be on common diseases, such as metabolic syndrome and type 2 diabetes, rare but instructive conditions will also be examined. An analytical approach, based on the primary literature, will be used and emphasis will be placed on critical evaluation of experimental design and datainterpretation. Prerequisite: Biology 380 or Chemistry 320 or consent of instructor. 6 credits, $M S$; NE, QRE, Offered in alternate years, Winter-J. Tymoczko
361. Developmental Neurobiology An examination of the cellular and molecular mechanisms underlying development of the nervous system. We will survey recent studies of a variety of model organisms to explore key steps in neuronal development including neural induction, patterning, specification of neuronal identity, axonal guidance, synapse formation, cell death and regeneration. The laboratory will focus on current techniques used to study neuronal development in invertebrate and vertebrate model systems. Prerequisites: Biology 240 or Biology 280. 6 credits, MS; NE, QRE, Not offered in 2010-2011
362. Developmental Neurobiology Laboratory 2 credits, ND; NE, Not offered in 2010-2011
363. Seminar: Selected Topics in Virology An examination of selected animal viruses. The course will focus on the most recent developments in HIV-related research, including implications for HIVtreatment and vaccines and the impact of viral infection on the immune system of the host. In addition to studying the structure and replication of particular viruses we will also discuss the current laboratory techniques used in viral research. Prerequisites: Biology 125 and 126.6 credits, MS; NE, QRE, Not offered in 2010-2011
364. Seminar: Selected Topics in Exercise Biochemistry An examination of how basic biochemical and physiological systems respond to the demands of exercise, and how they are modified in response to training. Prerequisite: Biology 278 or 380. 6 credits, MS; NE, QRE, Spring—L. Lunder, J. Tymoczko
365. Behavioral Endocrinology If it is adaptive for a particular behavior to be exhibited at an appropriate time and in a meaningful context, then we might expect hormonal signaling to play a key role in behavioral regulation. How much of the variability in male and female behavioral patterns is mediated by differences in sex steroid levels? How do circulating hormones early in life affect brain development and subsequent adult behavior? Are seasonal cycles of depression influenced by neuroendocrine mechanisms? These are a few of the questions that we will investigate in an attempt to understand the physiological mediation of behavior. Prerequisites: Biology 125 and 126.6 credits, $M S$; NE, QRE, Not offered in 2010-2011
366. Seminar: Grassland Ecology Grassland ecosystems cover one third of the Earth's surface and occur on every continent except Antarctica. Grasslands provide habitat for millions of species, play a major role in global carbon and nutrient cycles, and are the primary source of agricultural land, making them an important ecosystem both ecologically and economically. This course will utilize scientific literature to explore the environmental and biological characteristics of the world's grasslands from population dynamics to ecosystem processes. Topics include competition and succession, plant-animal interactions, carbon and nutrient cycling, the role of disturbances such as fire and land use change, and grassland management and restoration. Prerequisites: Biology 125 and 126, and one upper-level course in ecology (Biology 221 or 352) or plant biology (Biology 236) or permission of the instructor. 6 credits, MS, WR; NE, WR2, QRE, Spring-D. Hernandez
367. Seminar: Animal Behavior in the Galápagos We will explore topics in animal behavior that specifically relate to some of the unusual as well as the usual behavioral patterns exhibited by animals in the Galápagos Islands. One of the goals for this course is to attempt to design procedures for behavioral observation under less than optimal conditions. Wildlife conservation issues will not allow us to manipulate animals and will place serious time constraints on our observations. The challenge will be to design studies using comparative observations while minimizing the disturbance to the wildlife. Prerequisite: Biology 125 and 126 and permission of the instructor. This course is part of the off-campus study winter break Galápagos program involving two linked classes in fall and winter terms, this class is the first class in the sequence. 6 credits, MS; NE, QRE, Offered in alternate years, Not offered in 20102011
368. Animal Behavior in the Galápagos This course is the second part of a two-term sequence beginning with Biology 376. The Galápagos Islands are one of the few places on earth where large animals (especially birds) do not possess an innate fear of humans. This unusual behavioral pattern coupled with the amazing abundance of the island fauna, creates an extremely unique opportunity to observe, characterize, and measure animal behavior under natural conditions. This two-week course includes a visit to the Galápagos Islands and a short trip to the Ecuadorian Rainforest in December. Regular meetings during the term will be used to present oral and written reports based on our observations in the field. Prerequisites: Biology 376, permission of the instructor. 6 credits, MS; NE, Not offered in 2010-2011
369. The Molecular Basis of Human Disease This course will examine biochemical defects that underlie human diseases. An analytical approach, based on the primary literature used; emphasis will be placed on critical evaluation of experimental design and data-interpretation. Prerequisites: Biology 380 (or concurrent registration) or Chemistry 320. 6 credits, MS; NE, QRE, Not offered in 2010-2011
370. Seminar: Behavioral Genetics Recent advances in molecular biology have allowed researchers to test specific hypotheses concerning the genetic control of behavior. This course will examine information derived from various animal model systems, including humans, using a variety of techniques such as classical genetics, genome databases, transgenics, and behavioral neurobiology. Prerequisite: Biology 240. 6 credits, MS; NE, QRE, Not offered in 2010-2011
371. Biochemistry Biochemistry is an examination of the molecular basis of life processes. The course provides an indepth investigation of metabolic pathways, their interrelationships and regulation, protein structure and function with special emphasis on enzymes. Other topics include the techniques of protein analysis and how they are employed to examine problems of fundamental biochemical importance. This course meets the requirement for the Biochemistry concentration. Prerequisites: Biology 125 and 126 and Chemistry 233 and 234.6 credits, MS; NE, QRE, Fall-J. Tymoczko

## 381. Biochemistry Laboratory 2 credits, ND; NE, Fall—N. Henderson

382. Molecular Biology The molecular basis of the structure, replication, stable inheritance, and expression of genetic material illustrated with examples from the primary literature. Topics include: DNA replication and recombination, chromosome stability, DNA mutation and repair, regulation of gene expresion, methods of gene identification, and the impact of recombinant DNA technology on human genetics. Laboratory will focus on current techniques in molecular biology including: gene cloning, genome databases, DNA finger printing, DNA sequencing, and the polymerase chain reaction. Prerequisites: Biology 240, Chemistry 233. Concurrent registration in Biology 383 required. 6 credits, MS; NE, QRE, Not offered in 2010-2011

## 383. Molecular Biology Laboratory 2 credits, ND; NE, Not offered in 2010-2011

384. Oncogenes and the Molecular Biology of Cancer An analysis of the biochemical, molecular and cellular processes that result in the transformation of normal cells into cancer cells. An analytical approach, based on the primary literature used and emphasis will be placed on critical evaluation of experimental design and data-interpretation. Prerequisites: Biology 240 or 380.6 credits, MS; NE, Not offered in 2010-2011
385. Microbial Pathology Microbes are the most abundant organisms on earth, and microbial pathogens have caused human and plant disease epidemics worldwide. This course will focus upon the pathogenic strategy of a variety of well-studied microbes in order to illustrate our understanding of the molecular and cellular nature of microbial disease. We will analyze current and seminal papers in the primary literature focusing on mechanisms employed by microbes to attack hosts. Prerequisites: Biology 125 and 126.6 credits, MS; NE, QRE, Spring-R. Mitra
386. Neurobiology An analysis of the biology of neurons and the nervous system. Topics include the molecular basis of electrical excitability in neurons, transfer of information across synapses, mechanisms of sensation, learning, memory, and behavior. Prerequisites: Biology 125 and 126.6 credits, MS; NE, QRE, Spring-F. Jaramillo

## 387. Neurobiology Laboratory 2 credits, ND; NE, Spring-F. Jaramillo

388. Molecular Mechanisms of Drug Action This seminar will analyze the mechanism of drug action in prominent diseases. Emphasis will be placed on the molecular changes that promote the selected diseases and how particular drug strategies work to affect enzyme activity, receptor binding, or the synthesis and metabolism of molecules. We will discuss recent advances in the treatment of diseases in
which the standards-of-care or promising drug strategies include both chemical and biotherapeutic strategies. The process of drug discovery including the screening of combinatorial libraries and rational drug design will be described. Prerequisite: Biology 280 and Chemistry 233, or Biology 380 or Chemistry 320. 6 credits, MS; NE, Spring-N. Henderson
389. Biology Research Laboratory and/or field investigation associated with an ongoing research program in the department of Biology. The project is undertaken with the direct supervision of a faculty member. Regular individual meetings, written progress reports, and public presentations should be expected. 1-6 credits, ND; NE, Fall, Winter, Spring—Staff
390. Research Experience Seminar in Biology This seminar course in intended for students who have completed a summer research project or internship in the biological sciences. The intent of the course is to provide students with the opportunity to discuss their research experience, learn from the experiences of other members of the class, read relevant primary literature, and prepare a poster for a student research symposium. Prerequisites: Biology 125 and 126, and permission of the instructor. 3 credits, S/CR/NC, ND; NE, QRE, Fall-S. Deel
391. Critical Reading and Analysis of Primary Literature Guided instruction in reading and interpretation of contemporary primary literature in Biology. Prerequisite: Completion of Biology 125, 126 and three upper-level biology courses. 3 credits, S/CR/NC, ND; NE, Not offered in 2010-2011
392. Integrative Exercise Preparation and submission of the written portion of the Integrative Exercise. Continuing course (fall or winter). Oral examination, evaluation of the Integrative Exercise, and participation in visiting speakers seminars (spring). 6 credits, S/NC, ND; NE, Fall, Winter, SpringStaff

## CHEMISTRY (CHEM)

Chair: Associate Professor Deborah S. Gross<br>Professors: David G. Alberg, Marion E. Cass, Steven M. Drew, Tricia A. Ferrett, William E. Hollingsworth<br>Associate Professors: Joseph Walter Chihade, Deborah S. Gross, Gretchen E. Hofmeister, Daniela Kohen<br>Assistant Professor: Matthew T. Whited<br>Visiting Assistant Professor: Michael W. Burand

Chemistry provides the connection between molecular concepts and the complex systems found in nature. Chemistry courses stress the understanding of chemical principles, as well as the experimental basis of the science. The curriculum provides a strong foundation for graduate work in chemistry, biochemistry, and other chemistry-related areas, for positions in industry, for high school teaching, and for studies in the medical and health sciences. The department is on the list of those approved by the American Chemical Society (ACS). For ACS certification students must complete work in chemistry listed under the Professional Requirements section of this catalog.

Prospective chemistry majors should begin their study of mathematics, physics and chemistry in the first year. Majors are encouraged to participate in summer or fall term scientific research programs off campus or in the Chemistry Department Summer Research Program at Carleton.

## The Introductory Courses

Most first-year students will take Chemistry 123, Principles of Chemistry or Chemistry 128, Principles of Environmental Chemistry. Both are one-term courses designed for students who have had a good high school chemistry preparation. Although taught from slightly different perspectives, all
sections of Chemistry 123 or Chemistry 128 will cover the fundamental topics that prepare students for further work in chemistry, biology, geology, or medicine. When scheduling permits, we also offer a section of Chemistry 123 with problem solving. This smaller section will have additional class meetings for problem solving and review and is appropriate for students who have had a high school chemistry course but want to ease into the study of college-level chemistry.

Students who have not had a high school chemistry course should take Chemistry 122, An Introduction to Chemistry, which is designed to prepare students with little or no prior work in chemistry for further study in the discipline. This course also includes class sessions with problem solving and review.

Students planning to take Chemistry 122, 123, or 128 should take the self-administered chemistry placement evaluation, available on the chemistry department home page. This evaluation covers topics dealing with simple formulas, equations, stoichiometry, gas laws, and the properties of solutions. It also includes a list of topics for you to review before you take the placement exam.

## Requirements for a Major

Chemistry 123 or $128,230,233,234,301,302,343,344$; one of the following: 320, 328, 334, $348,350,351,353,354,359,360$; and one of the following lab courses: 306, 321, 329, 335, 338, 349, 352, 355; Physics: One five-week Newtonian mechanics course, Physics 131, 132, 141, or 142, and one of the following five-week physics courses: 151, 152, 153, 161, or 162; and Mathematics 211. An additional physics course, Physics 228 or 235 , is strongly recommended. Chemistry 400 is required of all majors.

## Major under Combined Plan in Engineering (see also Engineering in index):

In addition to completing the requirements for the chemistry major listed above, the student should also take the following courses required for admission to the engineering schools: Physics 161 and 162 or 228, Mathematics 241, and Computer Science 111. At the discretion of the department, one advanced course may be waived in some instances to allow the student more latitude in selection of courses.

## Chemistry Courses

100. Air Pollution and Human Health Air pollution is known to impact human health, and as a result it is regulated by governments around the world. Air pollution has many causes and takes many forms, and this course will begin with an overview of the interdisciplinary science of air pollutants. Questions such as the relationship between childhood asthma and air quality, the impact of diesel emissions on human health, and the relative impacts of possible strategies to mitigate pollution will be studied. In addition, we will study first-hand accounts of impacts of air pollution on health, and discuss the impacts of air pollution on populations. 6 credits, AI, WR1, QRE, Fall-D. Gross
101. Concepts of Chemistry A one-term chemistry course designed for non-science majors. In this course we examine what gives rise to three-dimensional shapes of molecules and we explore how the structure and composition of molecules gives rise to chemical reactivity. Our goal is to understand readily observable phenomena (e.g. removal of grease by soap, storage of toxins in fat tissues, cancer, viruses, etc). Topics include those of current global interest such as anthropogenic forces on the environment and energy producing technologies. The course includes one four-hour lab per week. 6 credits, MS; LS, QRE, Winter-M. Cass
102. An Introduction to Chemistry An introduction to the fundamentals of chemistry to prepare students to enter subsequent chemistry courses (Chemistry 123 or 128). Atoms and molecules, stoichiometry, and gases will be covered in the course. Although learning through discovery-based
processes, small groups, and short laboratory experimentation will occur, this is not a lab course and doesn't fulfill the requirements for medical school. This course assumes competence with simple algebra, but no prior chemistry experience. Students with high school chemistry should probably take Chemistry 123 or 128. (Determined by the self-administered Chemistry Placement Evaluation, Chemistry Home Page). 6 credits, MS; QRE, Winter-D. Kohen
103. Principles of Chemistry An introduction to chemistry for students who have taken high school chemistry or Chemistry 122. Topics include the electronic structure of atoms, periodicity, molecular geometry, thermodynamics, bonding, equilibrium, reaction kinetics, and acids and bases. Substantial independent project work is included in the lab. Each offering will also focus on a special topic(s) selected by the instructor. Students cannot receive credit for both Chemistry 123 and 128. Prerequisite: Adequate secondary school preparation as indicated by the self-administered Chemistry Placement Evaluation (Chemistry Home Page) or Chemistry 122.6 credits, MS; LS, QRE, Winter, Spring-M.

## Burand, D. Kohen

128. Principles of Environmental Chemistry The core topics of chemistry (i.e. thermodynamics, kinetics, equilibrium, and bonding) are central to understanding major environmental topics such as greenhouse warming, ozone depletion, acid-rain deposition, and general chemical contamination in air, water, and soil. These topics and the chemical principles behind them are addressed through an emphasis on the earth's atmosphere. One four-hour laboratory per week. Because this course covers the major topics of Chemistry 123 (but with an environmental emphasis), students cannot receive credit for both Chemistry 123 and 128. Prerequisite: Adequate secondary school preparation as indicated by the self-administered Chemistry Placement Exam (Chemistry Home Page) or Chemistry 122. 6 credits, MS; LS, QRE, Fall-W. Hollingsworth
129. Equilibrium and Analysis This course builds on topics from introductory chemistry and deals with quantitative aspects of acid-base and electron-transfer equilibria. Numerical and graphical methods are developed for the examination of these chemical systems. Several modern analytical methods of analysis are introduced including UV spectrophotometry, simultaneous spectrophotometric determinations of mixtures, potentiometry, and flow injection analysis. One laboratory per week. Prerequisite: Chemistry 123 or 128. 6 credits, MS; LS, QRE, Fall, Spring-S. Drew
130. Organic Chemistry I Theoretical aspects of carbon chemistry are examined with reference to structure-reactivity relationships, functional groups, stereochemistry, reaction mechanisms and spectroscopy. Laboratory work concentrates on modern techniques of organic chemistry, the synthesis of new compounds, and identification of unknown compounds using chemical and physical methods. One laboratory per week. Prerequisite: Chemistry 123 or 128.6 credits, MS; LS, QRE, Fall, Winter-D. Alberg, J. Chihade
131. Organic Chemistry II The chemistry of functional groups is continued from Chemistry 233, and is extended to the multifunctional compounds found in nature, in particular carbohydrates and proteins. The laboratory focuses upon inquiry-based projects and spectroscopic analysis. One laboratory per week. Prerequisite: Chemistry 233. 6 credits, MS; LS, QRE, Winter, Spring-D. Alberg, G. Hofmeister
132. Chemical Kinetics Laboratory A mixed class/lab course with one four hour laboratory and one lecture session per week. In class, the principles of kinetics will be developed with a mechanistic focus. In lab, experimental design and extensive independent project work will be emphasized. Prerequisite: Chemistry 230, Chemistry 233, and Mathematics 121.2 credits, ND, WR; NE, WR2, QRE, Fall-M. Burand, T. Ferrett, D. Gross, G. Hofmeister
133. Quantum Spectroscopy Laboratory This lab course emphasizes spectroscopic studies relevant to quantum chemistry, including experiments utilizing UV-VIS, infrared absorption spectroscopy, and visible emission spectroscopy. Corequisite: Chemistry 344. 2 credits, ND; NE, QRE, Winter-M. Cass, W. Hollingsworth, D. Kohen
134. Spectroscopic Characterization of Chemical Compounds This lecture/lab course teaches students how to use modern spectroscopic techniques for the structural characterization of molecules. Lecture sessions will cover topics in the theory and practical applications associated with GC-Mass Spectrometry, ESI- Mass Spectrometry, Infrared, and Nuclear Magnetic Resonance Spectroscopy ( ${ }^{1} \mathrm{H}$, ${ }^{13} \mathrm{C}$, and 2D experiments). Students will apply all of these techniques in the laboratory for the structural characterization of known and unknown molecules. Lecture sessions for the first five weeks, and one laboratory per week during the full ten-week term. Prerequisites: Chemistry 234 and 344 or consent of instructor. 2 credits, ND; NE, QRE, Fall-M. Burand, G. Hofmeister
135. Biological Chemistry This course involves the natural extension of the principles of chemistry to biological systems. The topics to be examined center around the biochemical formation and cleavage of chemical bonds, with an emphasis on the structure and function of the proteins that mediate these processes. Prerequisites: Chemistry 234 and either Chemistry 230 or Biology 380.6 credits, $M S$; NE, QRE, Spring-J. Chihade
136. Biological Chemistry Laboratory Purification and characterization of proteins and nucleic acids, with a focus on enzyme kinetics and mechanism, macromolecular interactions with small molecules and the basis of specificity in biological systems. One laboratory per week. Corequisite: Chemistry 320. 2 credits, ND; NE, QRE, Spring-J. Chihade
137. Environmental Analysis In this course, we will study the chemistry of molecules in the air, water, and soil. Emphasis will be placed on understanding the chemistry in the natural (unpolluted) environment, and the changes which occur due to human activity and pollution. In addition, we will explore the methods which are used to measure pollutants in the environment and their applicability, as well as regulatory issues of relevance to the topics studies. Prerequisites: Chemistry 230 or 233 or consent of the instructor. 6 credits, MS, WR; NE, WR2, QRE, Spring-D. Gross
138. Environmental Analysis Laboratory Credit for the laboratory portion of Chemistry 328. Corequisite: Chemistry 328.2 credits, ND; NE, QRE, Spring-D. Gross
139. Bioanalytical Chemistry A variety of techniques for the analysis of biologically relevant molecules are explored in this course, including chromatographic, spectroscopic, and electrochemical methods. Some specific topics to be covered include mass spectrometry of proteins, voltammetric methods for examining neurotransmitters in biological media, enzymatic methods for the determination of glucose, and chromatographic techniques for the analysis of amino acids and fatty acids. Prerequisite: Chemistry 230. 6 credits, MS; NE, QRE, Not offered in 2010-2011
140. Bioanalytical Chemistry Laboratory This laboratory provides hands-on experience working with electrospray mass spectrometry, voltammetry, and high performance liquid chromatography as applied to bioanalytical chemical analysis. Co-requisite: Chemistry 334. 2 credits, ND; NE, QRE, Not offered in 2010-2011
141. Introduction to Computers and Electronics in Chemical Instrumentation This laboratory serves to introduce students to the general components that make up any instrument useful in chemical analysis. These components include transducers, analog and digital electronic components, data transmission hardware, computers, and appropriate software. The specific topics to be covered are ion selective electrodes, fluorometry, analog and digital electronics, basic data acquisition principles, serial data communication, and LabVIEW programming. Prerequisite: Chemistry 230. 2 credits, ND; $L S$, QRE, Winter-S. Drew
142. Chemical Thermodynamics The major topic is chemical thermodynamics, including the First and Second Laws, the conditions for spontaneous change, thermochemistry, and chemical equilibrium. To showcase how chemists utilize energy concepts to solve problems, thermodynamics will be regularly applied to a number of real-world examples and scientific problems. Prerequisite: Chemistry 123 or 128,

Mathematics 211, and one of the following: Physics 151, 152, 153, 161 or 162.6 credits, MS; NE, QRE, Fall-T. Ferrett
344. Quantum Chemistry This course introduces quantum mechanics with an emphasis on chemical and spectroscopic applications. The focus will be on atomic and molecular quantum behavior involving electrons, rotations, and vibrations. The objective is to develop both a deeper understanding of bonding as well as an appreciation of how spectroscopy provides insight into the microscopic world of molecules. Prerequisite: Chemistry 123 or 128, Mathematics 211, and one of the following: Physics 151, 152, 153, 161 or 162. 6 credits, MS; NE, QRE, Winter-W. Hollingsworth
345. Statistical Thermodynamics Statistical mechanics is the field which bridges the gap between the modern microscopic world of quantum mechanics and the classical macroscopic world of thermodynamics. Starting with the allowed quantized energy levels for the different forms of molecular motion and then statistically averaging for a large collection of molecules, partition functions are developed which accurately predict thermodynamic properties such as free energy and entropy. Prerequisites: Chemistry 343 and 344. 2 credits, $S / C R / N C, M S$; NE, QRE, Not offered in 2010-2011
348. Introduction to Computational Chemistry This class will introduce students to computational chemistry with a focus on simulations in chemistry and biology. This course will include hands-on experience in running classical molecular dynamics and quantum chemistry programs, an introduction to methods to simulate large systems, and demonstrations of the use of more sophisticated software to simulate chemical and biological processes. It will also include a survey of the current literature in this area, as well as lecture time in which the background necessary to appreciate this growing area of chemistry will be provided. Corequisite: Chemistry 349 Prerequisite: Chemistry 343 and 344 or consent of the instructor. 6 credits, MS; NE, QRE, Not offered in 2010-2011
349. Computational Chemistry Laboratory Credit for the laboratory portion of Chemistry 348. Corequisite: Chemistry 348. 2 credits, ND; NE, Not offered in 2010-2011
350. Chemical and Biosynthesis This seminar course considers nature's biosynthetic pathways in conjunction with how organic chemists design the chemical synthesis of complex organic molecules. Important metabolic pathways for biochemical syntheses, as well as the methodology of chemical synthesis, will form the focus of the course. Prerequisite: Chemistry 234. 6 credits, MS; NE, QRE, Not offered in 2010-2011
351. Inorganic Chemistry Symmetry, molecular orbital theory and ligand field theory will provide a framework to explore the bonding, magnetism and spectroscopic properties of coordination complexes. Topics in reactivity (hard and soft acids and bases), bioinorganic chemistry, reaction mechanisms, and organometallic chemistry, will also be introduced. Prerequisite: Chemistry 344.6 credits, MS; NE, QRE, Spring-M. Cass, G. Hofmeister
352. Laboratory in Advanced Inorganic Chemistry Synthesis, purification and spectroscopic characterization of air sensitive and/or chiral transition metal complexes. One laboratory per week. Corequisite: Chemistry 3512 credits, ND; NE, QRE, Not offered in 2010-2011
353. Organic Chemistry III The correlation of structure and reactivity in organic molecular systems is studied through the analysis of reaction mechanisms. Topics will include linear free energy relationships, isotope effects, and molecular orbital theory. We will use these theories to analyze reactions, such as pericyclic, enantioselective, and organometallic transformations. Prerequisites: Chemistry 234 and 343.6 credits, MS; NE, QRE, Fall-G. Hofmeister
354. Lasers and Spectroscopy Understanding the principles of lasers in conjunction with the framework provided by spectroscopy provides a powerful way to advance a deeper understanding of the molecular basis of chemical reactivity. Important experimental techniques such as Raman scattering methods and molecular beams are explored in addition to a wide range of specific laser applications.

Readings are taken from both texts and literature. Prerequisites: Chemistry 302 and 344.6 credits, MS; NE, QRE, Spring-W. Hollingsworth
355. Lasers and Spectroscopy Laboratory This project-based lab uses both continuous-wave and pulsed lasers to explore not only the basic principles of laser operation but also spectroscopic applications and excited-state phenomena using techniques such as laser-induced fluorescence and Raman scattering. Corequisite: Chemistry 354. 2 credits, ND; LS, QRE, Spring-W. Hollingsworth
359. Molecular Orbital Theory This course will focus on the construction and understanding of molecular orbital (MO) diagrams using symmetry and energy arguments. Conceptual constructs will be contrasted to computational output to support theoretical tenets. We will begin with the construction of the MO diagrams of small molecules (water, ammonia) and proceed to larger molecules (such as octahedral metal complexes, benzene and organometallic compounds ) culminating in dimers and asymmetric molecules using the Hoffmann Fragment Approach. Prerequisites: Chemistry 351 or consent of the instructor. 6 credits, ND; NE, QRE, Not offered in 2010-2011
360. Chemical Biology This seminar course will center on current literature in chemical biology, an emerging field built around the use of small molecules both to gain an understanding of the molecular mechanisms of biological processes and to manipulate them in a defined and predictable fashion. Topics will include glycobiology, proteomics, chemical genetics, molecular recognition, and protein engineering. Prerequisite: Chemistry 234 and Biology 125 or 126.6 credits, MS; NE, QRE, Not offered in 2010-2011
361. Materials Chemistry Materials chemistry is an active area of scientific research involving the study of the properties of materials and their practical applications, and therefore provides a connection between chemistry and technology. Topics will include crystal structures, crystallography and diffraction techniques, thin films, liquid crystals, conductivity, band theory, semiconductivity, solid state chemistry, solid solutions, phase diagrams, synthetic methods, and purification techniques. Through this introduction to materials chemistry, students will gain an important understanding of a variety of materials on both a micro- and a macroscopic level. Corequisite: Chemistry 343 or Physics 339 . Prerequisite: Chemistry 234. 6 credits, ND; NE, QRE, Fall-M. Burand
394. Student-Faculty Research Projects related to summer research with Carleton chemistry faculty in all areas of chemistry. Activities include: original inquiry, laboratory and/or theoretical work, literature reading, formal writing related to research results, preparing talks or posters for research conferences, or preparing for upcoming summer work. Weekly meetings with a faculty advisor and/or research group are expected. Students doing projects that are not directly tied to Carleton's summer chemistry research program should enroll in Chemistry 291/2 or 391/2. Prerequisite: Permission of the instructor. 1 to 6 credits, ND; NE, Fall, Winter, Spring-Staff
400. Integrative Exercise Three alternatives exist for the department comprehensive exercise. Most students elect to join a discussion group that studies the research of a distinguished chemist or particular research problem in depth. Other students elect to write a long paper based on research in the primary literature, or write a paper expanding on their own research investigations. Most of the work for Chemistry 400 is expected to be accomplished during winter term. Students should enroll for five credits of Chemistry 400 during the winter, receive a "CI" at the end of that term, and then enroll for one credit during the spring, with the final evaluation and grade being awarded during spring term. 6 credits, $S / N C$, ND; NE, Winter, Spring-Staff

## CHINESE

See Asian Languages and Literature.

# CINEMA AND MEDIA STUDIES (CAMS) 

Chair: Associate Professor Carol Donelan<br>Professor: John F. Schott<br>Associate Professor: Carol Donelan<br>Assistant Professor: Jay Beck<br>Visiting Instructor: Eric Tretbar<br>Instructor: Paul Hager

The Cinema and Media Studies (CAMS) major combines the critical study of film and media with hands-on media production, reflecting a liberal arts philosophy in which critical thinking and creative making are mutually informing. The disciplinary core of the curriculum in CAMS is Cinema and Media Studies (critical studies and moving image production) with some reaching out towards Visual Studies (where Cinema Studies meets Art History and Studio Art) and Sound Studies (where Cinema Studies meets Music).

## Requirements for a Major

Seventy-two credits are required for the major; forty-eight credits in core courses and twentyfour credits in elective courses.

## I. Core Courses:

a) Two 100 -level Introductory Courses ( 12 credits):

CAMS 110 Introduction to Cinema and Media Studies
CAMS 111 Digital Foundations
b) One 200-level Studio Production Course (6 credits):

CAMS 270 Nonfiction I: Reality Storytelling
CAMS 271 Fiction I: Directorial Vision
CAMS 272 Advanced Editing Techniques (Not offered in 2010-2011)
CAMS 274 Special Projects Workshop (Not offered in 2010-2011)
CAMS 275 Audio Workshop (Not offered in 2010-2011)
CAMS 276 Fiction II: Producing and Directing the Short Film
CAMS 277 Studio Production (Not offered in 2010-2011)
CAMS 278 Studio Production (Not offered in 2010-2011)
CAMS 280 We Media: Theories and Practices of Writing Lives, Documenting Community, and Framing Change (Not offered in 2010-2011)
CAMS 281 Digital Photography: Visual Description \& Storytelling
CAMS 282 Graphic Design: Type + Image + Message (Not offered in 2010-2011)
CAMS 283 Site-Specific Media: Out and About
CAMS 285 Community Video
CAMS 289 New Media Seminar in Europe: Special Projects Workshop
c) Two 200-level History Courses ( 12 credits). One of these courses must be a film history course (either CAMS 210, 211 or 214).
ARTH 172 Modern Art: 1890-1945
ARTH 222 History of Photography
ARTH 240 Art Since 1945
CAMS 210 Film History I (Not offered in 2010-2011)
CAMS 211 Film History II
CAMS 214 Film History III
CAMS 241 History of American Broadcasting: From Wireless to the Web (Not offered in 20102011)
d) Two 300-level Theory Courses ( 12 credits). These courses may be taken multiple times as the subject matter changes.
CAMS 330 Cinema Studies Topics Seminar
CAMS 340 Media Theory: Objects and Methods (Not offered in 2010-2011)
CAMS 350 Visual Studies Topics Seminar
e) Integrative Exercise CAMS 400 ( 6 credits)

Students considering a major in the department are strongly encouraged to take CAMS 110 and 111 by the end of their sophomore year and the core two history courses (CAMS 210, 211, 214 or 241 or Art History 172, 222, 240) and at least one 300-level seminar course (CAMS 330, 340 or 350) by the end of their junior year.

Cinema and Media Studies offers a predictable range of offerings in media production that varies slightly in alternating years. This sequence of courses ensures that students desiring to do a production project for comps can have completed all preparatory class work by the spring of their junior year. All production-oriented majors should begin with CAMS 111 Digital Foundations, preferably in their first year. Majors interested in the core fiction sequence--CAMS 271 Fiction I, CAMS 279 Screenwriting, and CAMS 276 Fiction II--should take these courses as a sequence either in their sophomore or junior year. Majors interested in nonfiction production should take CAMS 270 Nonfiction I, and CAMS 290 Community Video and consider an additional project through CAMS 370 Advanced Project Workshop. Students in any medium who have sufficient preparation may enroll in the CAMS 370 Advanced Production Workshop where they develop and execute an advanced project in consultation with the instructor.

## II. Elective Courses

Twenty-four credits in elective courses are required for the Cinema and Media Studies major. Credit may be obtained by enrolling in departmental and approved extra-departmental courses with the following stipulations:
a) Any CAMS course not fulfilling a core requirement can serve as an elective course for the CAMS major.
b) A maximum of 18 credits in elective CAMS production courses count toward the major.

CAMS 242 Sound and Music in New Media (Not offered in 2010-2011)
CAMS 270 Nonfiction I: Reality Storytelling
CAMS 271 Fiction I: Directorial Vision
CAMS 272 Advanced Editing Techniques (Not offered in 2010-2011)
CAMS 274 Special Projects Workshop (Not offered in 2010-2011)
CAMS 275 Audio Workshop (Not offered in 2010-2011)
CAMS 276 Fiction II: Producing and Directing the Short Film
CAMS 277 Studio Production (Not offered in 2010-2011)
CAMS 278 Studio Production (Not offered in 2010-2011)
CAMS 280 We Media: Theories and Practices of Writing Lives, Documenting Community, and
Framing Change (Not offered in 2010-2011)
CAMS 281 Digital Photography: Visual Description \& Storytelling
CAMS 282 Graphic Design: Type + Image + Message (Not offered in 2010-2011)
CAMS 283 Site-Specific Media: Out and About
CAMS 285 Community Video
CAMS 289 New Media Seminar in Europe: Special Projects Workshop
CAMS 370 Advanced Production Workshop (Not offered in 2010-2011)
c) A maximum of 12 credits in extra-departmental elective courses count toward the major. Extra-departmental elective courses approved for the CAMS major are listed on the Registrar's Web site (Schedule of Classes/Enroll page) each term.

AMST 226 Latinas in Hollywood (Not offered in 2010-2011)
ARTH 222 History of Photography

ARTS 238 Photography I
ARTS 339 Advanced Photo: Digital Imaging
CHIN 240 Chinese Cinema (Not offered in 2010-2011)
ENGL 100 Shakespeare on Film
ENGL 243 Text and Film (Not offered in 2010-2011)
ENGL 245 Bollywood Nation
ENGL 247 The American West
ENGL 362 Narrative Theory
FREN 233 The French Cinema (Not offered in 2010-2011)
FREN 250 Mali Program: Film and Society in Mali (Not offered in 2010-2011)
GERM 216 Studies in German Cinema: Current Issues in Contemporary Film (Not offered in 20102011)

GERM 219 German Film after World War II (Not offered in 2010-2011)
JAPN 231 Japanese Cinema in Translation (Not offered in 2010-2011)
LCST 245 Introduction to Critical Methods: Structure, Gender, Culture
MUSC 115 Music and Film
PHIL 220 Film and the Emotions
POSC 203 Political Communication: Election Campaign Advertising and Public Opinion* (Not offered in 2010-2011)
POSC 204 Media and Electoral Politics: 2010 United States Election
POSC 220 Politics and Political History in Film
POSC 303 Political Communication: Election Campaign Advertising and Public Opinion* (Not offered in 2010-2011)
RUSS 255 Russian Cinema: History and Theory (Not offered in 2010-2011)
SPAN 250 Spanish Cinema (Not offered in 2010-2011)
SPAN 356 The Cuban Revolution and the Revolution of Literature

## Cinema and Media Studies Courses

109. Media Production Lab An introduction to key technical and aesthetic concepts of video storytelling to be applied to assignments in the corresponding course, including developing story content and context, analyzing successful examples of video storytelling, building skills in scripting, composition, camera movement, lighting, audio recording, interviewing, rhythm and pacing in editing and incorporating graphics. Instructor's permission required. 2 credits, ND; ARP, Fall, Winter, SpringP. Hager
110. Introduction to Cinema and Media Studies This course introduces the basic terms, concepts and methods used in Cinema and Media Studies and helps build critical skills for analyzing media texts, technologies, industries, styles and genres, narrative strategies and ideologies. Classroom discussion focuses on applying critical concepts to a wide range of films and other media. Requirements include class attendance and participation, readings, required evening film screenings, and various written assignments and exams. 6 credits, AL, WR; LA, WR2, Fall, Winter-J. Beck, C. Donelan
111. Digital Foundations This class introduces students to the full range of media production tools and forms, including audio, video, graphics, lighting, and studio production. Students learn the fundamentals of moving-image media, including composition, camera movement, and montage; and produce several short narrative and non-fiction projects with pro-level video cameras and Apple hardware and software, including Final Cut Pro and Soundtrack Pro. This is an essential foundation for anyone interested in moving-image production and learning the specifics of CAMS' studios, cameras, and lighting gear. 6 credits, ND; ARP, Fall, Winter, Spring - P. Hager, E. Tretbar
112. Film History I This course surveys the first half-century of cinema history, focusing on film
structure and style as well as transformations in technology, industry and society. Topics include series photography, the nickelodeon boom, local movie-going, Italian super-spectacles, early African American cinema, women film pioneers, abstraction and surrealism, German Expressionism, Soviet silent cinema, Chaplin and Keaton, the advent of sound and color technologies, the Production Code, the American Studio System, Britain and early Hitchcock, Popular Front cinema in France, and early Japanese cinema. Assignments aim to develop skills in close analysis and working with primary sources in researching and writing film history. 6 credits, AL; LA, IS, Not offered in 2010-2011
113. Film History II This course covers the continued rise and development of cinema from 1940-1970, looking simultaneously at both the American studio system and international cinemas. Emphasis is placed on wartime and post-war genres, the development of wide screen and color technologies, New Wave modernisms, Third Cinema movements, and international trends in narrative, documentary and avant-garde film. Requirements include class attendance and participation, readings, required evening film screenings, and various written assignments and exams. 6 credits, $A L, R A D ; L A, I S, F a l l-C$.

## Donelan

213. Italian Neorealism and Global Cinema Neorealism designates a set of films produced by the Italian film industry during the post-World War II years, but filmmakers all over the world have been preoccupied with neorealism's primary concern--representing social reality. In this course we examine the traditional neorealist films of Rossellini, De Sica and Visconti in relation to relevant theories, the modernist films of Fellini, Pasolini and Antonioni that question or problematize neorealism, and the influence of neorealist aesthetics and politics on global cinema. 6 credits, AL; LA, IS, Offered in alternate years, Winter-C. Donelan
214. Film History III This course is designed to introduce students to film history, 1970-present, and the multiple permutations of cinema around the globe. The course charts the development of the New American cinema since the mid-1970s while examining the effects of media consolidation and convergence. Moreover, the course seeks to examine how global cinemas have reacted to and dealt with the formal influence and economic domination of Hollywood film making on international audiences. Class lectures, screenings, and discussions will consider how cinema has changed from a primarily national phenomenon to a transnational form of communication in the twenty-first century. 6 credits, AL; LA, Winter-J. Beck
215. American Film History In this course, we investigate Hollywood cinema as a unique economic, industrial, aesthetic, and cultural institution. Topics addressed include the experience of movie-going, the nature of Hollywood storytelling, and the roles played by the studio system, the star system, and film genre in the creation of a body of work that functions both as entertainment and as an influential mediator of American experience, identity, and culture. 6 credits, AL; LA, IDS, Not offered in 20102011
216. American Cinema of the 1970s American cinema from 1965-1977 saw the reconfiguration of outdated modes of representation in the wake of the Hollywood studio system and an alignment of new aesthetic forms with radical political and social perspectives. This course examines the film industry's identity crisis in the departure from industrial standards and the cultural, stylistic, and technological changes that accompanied the era. The course seeks to demonstrate that these changes in cinematic practices reflected an agenda of revitalizing cinema as a site for social commentary and change. 6 credits, ND; LA, Offered in alternate years, Spring-J. Beck
217. Border Crossings: Postmodern Perspectives on French and German Cinema In this course, we will explore the responses of French and German filmmakers to the challenges facing Europe as it redefined itself throughout the twentieth century. Taking Foucault's and Derrida's theories about the center and the margin as a starting point, we will examine such issues as national identity, marginalization, shifting gender roles and technological change. Filmmakers to be discussed will be

Jean-Luc Godard, Jean Renoir, Agnes Varda, Fritz Lang, Rainer W. Fassbinder and Helma SandersBrahms. 6 credits, AL; LA, IS, Winter-S. Leonhard, D. Strand
218. Contemporary Global Cinemas This course is designed as a critical study of global filmmakers and the issues surrounding cinema and its circulation in the twenty-first century. The class will examine the growth and evolution of cinema as a global event and look at points of contact between different cultural discourses, cinematic styles, genres, and reception. It will look at national, transnational, and diasporic-exilic discourses as well as considering how film articulates both culture and cultural contexts. Artistic, social, political, and industrial issues will be examined each week to provide different models of cinematic creation and consumption. 6 credits, ND; LA, Offered in alternate years, Spring-J. Beck
225. Film Noir: The Dark Side of the American Dream After Americans grasped the enormity of the Depression and World War II, the glossy fantasies of 30s cinema seemed hollow indeed. During the 40s, the movies, our true national pastime, took a nosedive into pessimism. The result? A collection of exceptional films chocked full of tough guys and bad women lurking in the shadows of nasty urban landscapes. This course applies the tools of formal criticism, intellectual history, and feminist theory to films like Double Indemnity, Out of the Past, and Kiss Me Deadly. 6 credits, AL; LA, Spring-C. Donelan

## 226. The Melodramatic Imagination: Visual Storytelling in Popular Media and Fine Art

 Melodrama is arguably the dominant visual storytelling mode in American popular culture, existing across popular media, manifesting in films, television shows, magazines, advertising, video games and comics. It is evident in "chick flicks" and action blockbusters, film stills and posters, soap operas, sports shows, commercials, celebrity profiles and newscasts. In addition to exploring the reception and meanings of melodrama in popular film and media, we will investigate the migration of "lowbrow" melodrama into "highbrow" media, including fine art photography, painting and sculpture. Students enrolled in the course will participate in researching and mounting an exhibit in the Carleton Art Gallery. 6 credits, AL; LA, Not offered in 2010-2011228. Avant-Garde Film \& Video from Dada to MTV This class charts avant-garde film, video and multi-media from Salvadore Dali's surrealist cinema in the 1920's to the flowering of video art in the mid-1980's. Key films are read against the progression of art historical styles and "-isms" that informed them. We will take an extended look at Beat Culture in the 1950's as a context for the emergence of the American avant-garde. Expect to view rare original prints at Walker Art Center and make your own experimental film. 6 credits, AL; LA, Not offered in 2010-2011
229. Cinema Directors: Bergman and Godard This seminar explores the ground-breaking films of Ingmar Bergman and Jean-Luc Godard, the Shakespeare and Joyce of Cinema. These two cinema giants reinvented cinema and cinematic language through their audacious personal styles. Through close analysis of their films, director interviews, and theoretical writings, we investigate how these directors developed specific cinematic forms and language to more fully express their critiques of religion, family, marriage, sexual politics, 60s youth culture, and cinema itself. 6 credits, AL; LA, Offered in alternate years, Fall-E. Tretbar
230. History of American Broadcasting: From Wireless to the Web What forces shaped broadcasting's development in the United States? How have our broadcast media changed throughout their history, and what does the future hold? This course surveys over 100 years of American broadcasting, from nineteenth-century wireless telegraphy to early twentieth-century radio broadcasting, the postwar television boom and rise of TV's Classic Network System, and the recent growth of cable, satellite, and internet distribution. Changing styles and genres are linked to shifting technologies, regulations, industry economics, and broader changes in social context. Prerequisite: Cinema and Media Studies 110 recommended but not required. 6 credits, ND; LA, IDS, Not offered in 2010-2011
231. Sound and Music in New Media This course covers the theory and production of sound and music
in radio, electronic soundscapes, electroacoustic music, and music in film and video. The course will focus on the aesthetics, theory, and practice of sound in these media, and students will create sound artworks in a laboratory component, using ProTools and other sound engineering software. Students will produce several audio projects, including a podcast of a radio show, an electronic musique concrete or sound art piece, and a musical accompaniment to a short film or video using pre-existing music. Music reading and/or knowledge of musical recording software is helpful but not required for this course. 6 credits, AL; HI, Not offered in 2010-2011
232. Film Sound Studies: History, Technology and Aesthetics Although cinema is an audio-visual medium, there has long been a tendency to privilege the visual component of film over the elements of film sound. In an attempt to redress this imbalance, this course will focus on the technological, cultural, and theoretical histories of film sound throughout the twentieth century. We will examine the transition to sound in United States and European cinema, radio's role in the development of sound aesthetics, standardized and alternative sound practices, the role and use of music in cinema, and the complex effects of contemporary sound technologies on the medium and experience of film. 6 credits, $N D ; L A$, Offered in alternate years, Winter-J. Beck
233. Creativity and Innovation in Mass Media What is the nature of creativity and innovation? What are their conditions and possibilities within industrialized mass media systems? Beginning with early critiques of mass media as obstacles to creativity and innovation, we will examine countervailing efforts to position mass media producers as inventive "auteurs," and explore several new approaches developed recently by leading industry scholars. We will analyze the institutional logics of mass media industries and consider the role that medium, genre, control of production, professional training, profit margins, and access to technology, capital, and human resources play in enabling or limiting particular forms of creative expression. 6 credits, ND; LA, Not offered in 2010-2011
234. Open the Box: Critical Approaches to Television Studies How do we define "television" as an object of critical inquiry, and what is the task of television criticism? As television technologies, industries, programming, and audiences have changed in recent decades, so too have approaches pursued by television scholars. This class provides an overview of critical methods in contemporary television studies, including formal analysis of television style and narrative; ideological analysis from psychoanalytic, Marxist, feminist, and cultural studies perspectives; industry analysis of institutional pressures shaping program production; and studies of audiences and fan communities. Students will apply the methods studied in a series of short papers on programs of their choosing. 6 credits, $A L ; L A$, Not offered in 2010-2011
235. Sound in the Era of Mechanical Reproduction: From Edison to the iPod In this class we study the history of sound reproduction, tracing the rise of the phonograph, radio, and sound cinema, the hi-fi revolution, cassette culture, transformations of television sound, video game sound, and new digital audio devices. Emphasis is on the relationships between different audio media and the various technological, economic, aesthetic, and social exigencies that have shaped their historical development. Students will complete semi-regular listening assignments and pursue close analyses of course readings, with critical attention to questions of historiographic method. Students will also participate in a collaborative research project and multimedia presentation. 6 credits, ND; LA, Not offered in 2010-2011
236. History and Theory of Emerging Media: From Newspapers to the Net How do new media come into being? What competing technologies and uses of them are proposed, what hope and fears surround them, and how do they find an enduring place in our society? This course surveys a growing body of historical and theoretical work on processes of media emergence past and present, from the beginnings of the newspaper, telephone, and telegraph, to the cinema, radio, television, internet, and beyond. Final paper required. 6 credits, ND; LA, Not offered in 2010-2011
237. Sound Studies: Methods and Debates The recent rise of "visual studies" in the American
academy has spurred an interest in a parallel field of "sound studies." Examining scholarship on sound media and auditory culture from a variety of disciplinary and interdisciplinary perspectives, this course explores the varied subject matter and approaches pursued by major advocates and exemplars of this emerging field. Topics addressed include semiotics of sound and sound-image relations, sound perception and arts of listening, philosophies of fidelity and politics of noise, sound technologies and audio industries, audio engineering and sound art. Final paper or creative project required. 6 credits, $A L$; LA, Not offered in 2010-2011
238. New Media Seminar in Europe: Understanding New Media Most broadly, new media may be thought of as the intersection of the arts and the emerging universe of digital tools and distribution strategies. The class explores the history of new media, with particular emphasis on key concepts, genres and critical issues. We explore a wide variety of new media projects available online, and typically visit practicing new media artists in the area. No special computing skills are required, but students wishing to may undertake a creative project as part of the class. 6 credits, AL; LA, Offered in alternate years, Spring—J. Schott
239. Nonfiction I: Reality Storytelling Here students develop the ability to turn a nonfiction subject into a compelling, well-told media project. In addition to exploring essential techniques of nonfiction production, we focus on documentary structure and story-forms. Increasingly, students are gathering, shaping and producing knowledge in a variety of media formats. Whether you want to produce social documentary, experimental nonfiction, or a media-based comps project, this class will give you the tools you will need. The class culminates in the production of a ten to fifteen minute project. Prerequisite: Cinema and Media Studies 111 or permission of the instructor. 6 credits, AL; ARP, Spring-E. Tretbar
240. Fiction I: Directorial Vision Visiting independent feature film writer-director Eric Tretbar will introduce students to essential skills for directing fiction cinema. In a series of workshop exercises, students will explore the director's process from initial script analysis through shooting and editing. Students will develop and complete sequences exploring contrasting stylistic approaches in acting, directing, shooting, editing and narrative construction. At the center of the course is the goal of effective storytelling and understanding the options directors have for realizing their vision. The course will culminate in a short fiction project chosen by each student in consultation with Professor Tretbar. Prerequisite: Cinema and Media Studies 111, or permission of the instructor. 6 credits, AL; ARP, FallE. Tretbar
241. Advanced Editing Techniques New digital media are changing the way we produce and distribute art and information. We'll combine critical perspectives with hands-on production with particular focus on multi-media for the web and DVD authoring. Prerequisite: Cinema and Media Studies 111.6 credits, AL; ARP, Not offered in 2010-2011
242. Special Projects Workshop Students with their instructor produce a long-form broadcast-quality nonfiction project. Roughly ten mid- to advanced-level students will work to conceive, research, shoot and edit the film. This is an exceptional opportunity for committed student video producers. Permission of the instructor is required for enrollment. 6 credits, AL; ARP, Not offered in 2010-2011
243. Audio Workshop The Audio Workshop introduces students to essential skills in audio storytelling and drama. Students will produce projects in three essential genres: reportorial projects (suitable for news or research reporting), personal narratives (along the lines of This American Life), and new audio drama (fiction recorded in our sound booth with actors). Along with essential technical skills, students will engage critical historical and esthetic issues in audio, along with directorial skills like interviewing and directing voice talent. 6 credits, AL; ARP, Not offered in 2010-2011
244. Fiction II: Producing and Directing the Short Film This course builds on the skills developed in Cinema and Media Studies 271 Fiction 1, and takes them further in the areas of screenplay analysis, cinematography, casting, production management, and location shooting-skills utilized in the production
of a short work of fiction, the focus of this course. Since this is not a screenwriting class, students work from scripts written in Cinema and Media Studies 279 Screenwriting, found elsewhere or provided by the instructor. This year's edition is taught by visiting independent cinema writer-director Eric Tretbar. Prerequisite: Cinema and Media Studies 271, or permission of the instructor; Cinema and Media Studies 279 strongly recommended. 6 credits, AL; ARP, Spring-E. Tretbar
245. Studio Production In this class we will explore the full resources of studio production by producing and distributing to the campus a weekly video show. Students will shoot and edit field segments and the studio program which we will publish as a web-based video subscription. The class will construct a permanent set with green-screen graphics background, and explore the logic of studio production including live, three-camera switching. Additionally, we will review the historical evolution of studio broadcasting as a key contemporary media form. Prerequisite: Cinema and Media Studies 111 or permission of the instructor. 6 credits, AL; ARP, Not offered in 2010-2011
246. Studio Production In this class we will explore the full resources of studio production by producing and distributing to the campus a weekly video show. Students will shoot and edit field segments and the studio program which we will publish as a web-based video subscription. The class will construct a permanent set with green-screen graphics background, and explore the logic of studio production including live, three-camera switching. Additionally, we will review the historical evolution of studio broadcasting as a key contemporary media form. Prerequisite: Cinema and Media Studies 111 or permission of the instructor. 3 credits, AL; ARP, Not offered in 2010-2011
247. Screenwriting "Screenwriting is an architectural, not literary activity."--David Mamet. Screenwriting has baffled many literary giants, including William Faulkner. But the deceptively simple art of cinematic storytelling can be learned--not by formula, but through form. Visiting writer-director Eric Tretbar teaches the principles and universal forms of cinematic storytelling with which students can write unique, challenging, meaningful scripts. Exercises with well-known movies teach students to select and arrange narrative material, analyze and design scenes, and map and analyze story structure. With these basic tools, students design, outline, and write their own short film. Prerequisite: Cinema and Media Studies 271 recommended but not required; or permission of the instructor. 6 credits, $A L ; A R P$, Winter-E. Tretbar
248. We Media: Theories and Practices of Writing Lives, Documenting Community, and Framing Change Storytelling is a tool for preserving memory, writing history, learning, entertaining, organizing, and healing. It is in the telling of stories that communities build identities, construct meaning, and make connections with others and the world. In this course we will examine modes and power dimensions of digital storytelling, investigate the role of digitized media used for community organizing and development, and discuss the gendered and racialized digital divide. Students will gain tools to tell their own stories using digital media (video, still images, sound and artwork) and learn Mac-based editing. Students will produce photographic and video work that will be shared on the course blog. 6 credits, $A L$; ARP, IDS, Not offered in 2010-2011
249. Digital Photography: Visual Description \& Storytelling This production class in digital photography explores using images to describe and narrate the world around us. Students will learn to master their digital camera, develop an eye for composition and photographic style, learn advanced techniques in Photoshop, and then apply these skills in creating a photo essay about topics in the community or on campus, and publish theses online or in print. Additionally, students will create fictional photographic stories based on existing short fiction, their own stories, or other experimental forms. This class offers a solid foundation for those interested in digital imaging, visual documentary, moving image storytelling, and photojournalism. Digital camera required. 6 credits, AL; LA, Fall-J.

## Schott

282. Graphic Design: Type + Image + Message Provides students with essential skills for producing
and publishing forceful, effective visual communication. We focus on the combination of typography and image in formats such as graphic-intensive print-style publications, posters, still and motion-based typography. Production tools are primarily digital, including Photoshop, Adobe InDesign, Apple iWorks, LiveType and OmniGraffle. Unlike traditional pre-professional graphic design classes that teach a "design vocabulary," this class is predicated on the notion that the best design evolves from one's own specific, real-world design problems. Students read widely in the emerging literature of visual communication and the visualization of information. Prerequisite: Cinema and Media Studies 110 and 111 or permission of the instructor. 6 credits, AL; ARP, Not offered in 2010-2011
283. Site-Specific Media: Out and About Video and photography are coming off the screen, out of the gallery, finding their way into the world through site-specific, installation-style projects. We will take visual projects out of the studio using projection and print techniques that speak and respond to particular locations. Imagine a multi-track movie playing on ten laptops in the Arb; or a film projected on the side of a mobile home with viewers in folding chairs. We will explore VJ software and produce live multi-track visuals to accompany a band performance at the end of the class. This class should be attractive to videographers, musicians, photographers, dancers and others with a speculative, experimental bent. Prerequisite: Cinema and Media Studies 110 and 111 or permission of the instructor. 6 credits, AL; ARP, Fall-J. Schott
284. Community Video In this course students will focus on non-fiction structure, story, and production techniques as they create video projects working in collaboration with Northfield area non-profit organizations. Students will develop producer-client relationships (including production agreements) with organizations of their choosing. This class will meet with Carleton's Academic Civic Engagement office to identify local organizations and civic opportunities. Students will be required to produce two video projects for two separate organizations. 6 credits, ND; ARP, Winter-P. Hager
285. New Media Seminar in Europe: Special Projects Workshop This is a "special projects" workshop exploring digital video, photography, audio, camera phones, GPS and the like. Projects change in each edition of the workshop, but in all cases we typically explore core theoretical issues that inform production, visit reference projects typically available online, and then develop a working plan for executing projects. The workshop is always designed to accommodate students with minimal or baseline production as well as those with more extensive experience. 6 credits, $A L$; ARP, Offered in alternate years, Spring-J. Schott
286. New Media Seminar in Europe: Directed Reading The topic is "Genius Loci: Cultural and Technological Perspectives on Place and Location." 4 credits, $S / C R / N C$, $N D$; NE, Offered in alternate years, Spring—J. Schott
287. Moviegoing and Film Exhibition in America How have the sites where movies are screened, the sorts of entertainment programs offered, and the experience of movie going varied over time and in different locations and communities? In this course, we will familiarize ourselves with the various methodologies for doing film history while researching and writing (or producing in media form) the history of movie culture at the local level, making use of primary sources such as newspapers, interviews, and photographs. 6 credits, AL; HI, Not offered in 2010-2011
288. Cinema Studies Topics Seminar The purpose of this seminar is to guide students in consolidating their conceptual understanding of theories central to the discipline of Cinema Studies. Students will engage in the close reading of classical and contemporary film theory and participate in stimulating, impassioned debate about those theories. The course covers the realist and formalist traditions in classical film theory, theories related to the ontology of the photographic, cinematic and digital images, theories of authorship and genre, and trends in contemporary film theory, including psychoanalysis, ideology, cultural studies and phenomenology. Prerequisite: At least one film history course (Cinema and Media Studies 211, 212 or 214) or permission of instructor. 6 credits, AL; LA, Fall-C. Donelan
289. Media Theory: Objects and Methods Media form an important and pervasive part of our everyday lives, affecting how we think, act, and communicate with one another, and offering vital resources for understanding world and self. This class surveys approaches used by scholars of print, radio, television, film, and new digital technologies to understand our modern media environment, including narrative theory, ideological analysis, technology studies, production studies, public sphere theory, cultural geography, political economy, globalization theory, convergence theory, and audience studies. Assignments include short written analyses of readings and a self-designed practicum project. No prerequisites. 6 credits, ND; HI, Not offered in 2010-2011
290. Visual Studies Topics Seminar Images abound: contemporary life increasingly is defined by the pervasiveness of visual images which inform, entertain, document, manipuate, and socialize us. This seminar explores a wide range of critical issues and methods--both historical and contemporary--that will provide students a theoretical and critical command of contemporary visual experience. Our primary focus will be the photographic image as the foundational logic not only of photochemical and digital photography, but of cinema, the web and emerging forms such as virtual reality and computational digital imagery. This seminar offers essential critical tools for students of film history, photography and contemporary media. Prerequisite: Cinema and Media Studies 110 or permission of instructor. 6 credits, ND; LA, Winter-J. Schott
291. Advanced Production Workshop This Workshop is for advanced production students who have taken Cinema and Media Studies 111 Digital Foundations plus an additional Cinema and Media Studies 200-level video production course. This year visiting independent feature film writer-director Eric Tretbar will teach the fundamental properties of motion picture photography (applicable to both digital and film cameras), plus lighting and camera movement techniques used to create more expressive moving images. A series of workshop exercises emphasize basic technical and visual vocabulary. Additionally, students will work on a project of their own developed with Professor Tretbar. Prerequisite: Cinema and Media Studies 111, plus an additional 200-level Cinema and Media Studies production course. 6 credits, AL; ARP, Not offered in 2010-2011
292. Integrative Exercise 6 credits, $S / N C$, ND; NE, Fall, Winter, Spring—Staff

## CLASSICAL LANGUAGES

Chair: Professor Clara S. Hardy<br>Professors: Jackson Bryce, Clara S. Hardy, Nancy C. Wilkie, Clayton L. Zimmerman Assistant Professor: Kathryn Seidl Steed<br>Visiting Assistant Professor: Christopher Polt

Courses in the Department of Classical Languages cover numerous aspects of the ancient GrecoRoman world. While the majority of our courses focus on the study of Greek and Latin literary, historical, and philosophical texts, many also incorporate evidence from material remains such as art, architecture, archaeological remains of daily life, as well as public and private inscriptions. Courses in the languages (Latin and Greek) are designed to provide students with a thorough introduction to the language and literature of ancient Greece and Rome. Courses taught entirely with readings in English (Classics courses) include those centered around literary genres, Greek and Roman history, and topics such as gender and archaeology. Classics 110, Introduction to Classical Studies, provides an in-depth study of Periclean Athens and Early Imperial Rome and is a requirement for all majors in the department. Completion of the Greek and Latin sequences, 101, 102, 103, and 204, fulfills the college language requirement.

## Requirements for the Major

The Department of Classical Languages offers four majors:

Major in Classical Studies: This major is intended for students who want a broad introduction to classical civilization. Students anticipating further work in classics should supplement the requirements of this major with more courses in the ancient languages. Requirements: 30 credits of work in Greek and/or Latin, 24 credits of course work beyond the 102 level in the student's principal language, whether Greek or Latin; six further credits of language courses, either at the upper level of the principal language or at the elementary level in the other language; 36 additional credits in the general area of classical civilization, including Classics 110, 227 and 228. Further courses in the languages may be included in this group. Students must choose a particular focus within the general area of classical civilization and shape their program around it. Normally this will involve a concentration on either Greek or Roman civilization with work in the appropriate language. All majors must take Classics 295 in their junior year, and Classics 394 and Classics 400 in their senior year.

Major in Greek: This major is intended for students who want a thorough introduction to the language and literature of Greece; students who intend to go on to graduate work in classics will need to take more work in Latin than this major requires. Requirements: 36 credits in Greek beyond Greek 102. In addition, students must take 30 additional credits in the general area of classical civilization including Classics 110 and 227. Further courses in Greek beyond 102 or Latin at any level may count toward this requirement. All majors must take Classics 295 in their junior year, and Classics 394 and Classics 400 in their senior year.

Major in Latin: This major is intended for students who want a thorough introduction to the language and literature of Rome; students who intend to do graduate work in classics will need to take more work in Greek than this major requires. Requirements: 36 credits in Latin beyond Latin 102. In addition, students must take 30 additional credits in the general area of classical civilization including Classics 110 and 228. Further courses in Latin beyond 102 and Greek at any level may count toward this requirement. All majors must take Classics 295 in their junior year, and Classics 394 and Classics 400 in their senior year.

Major in Classical Languages: This major is intended for students who plan to pursue graduate work in classics or who want a thorough introduction to the language and literature of both Greece and Rome. Requirements: 30 credits in Latin beyond Latin 102, plus 24 credits in Greek beyond Greek 102; or 30 credits in Greek beyond Greek 102, plus 24 credits in Latin beyond Latin 102. In addition, students must take the following in-translation courses: Classics 110 and either 227 or 228, depending on the language emphasized. All majors must take Classics 295 in their junior year, and Classics 394 and Classics 400 their senior year.

The College language requirement may be satisfied by completion with a grade of at least C- in any of the Greek or Latin languages numbered 204 or above.

The Classics Departments of Carleton College and St. Olaf College cooperate in a program under which students of either college may elect certain courses on the other campus. This option is especially appropriate for upper level language courses not offered at Carleton. Carleton students should register for St. Olaf courses through the inter-registration process.

The Concentration in Archaeology will interest many students who are attracted to ancient civilization.

Certificate of Advanced Study in Foreign Language and Literature or Foreign Language and Area Studies: In order to receive the Certificate of Advanced Study in Classical Languages students must fulfill the general requirements (refer to Academic Regulations) in the following course distribution: six courses, of which at least three will be in the target language at the 200 level or above. Courses remaining may be from the Classics department or from a list of approved courses offered by other departments (philosophy, art, history, political science, etc.) Although courses for the certificate may be taken on a S/CR/NC basis "D" or "CR" level work will not be sufficient to satisfy course requirements.

## Classics Courses (CLAS)

(These courses do not presume knowledge of Greek or Latin)
100. Laughing Together, Laughing Alone: Individual and Society in Western Comedy Comedy is one of the oldest and most relatable forms of art, but what does it do for us? Does it celebrate what we share and can laugh about together, or does it mock the conflicts that arise when people interact? What can comedy teach us about our rights as individuals and our roles as members of larger communities (e.g., family, college, country, and world)? We will consider these and related questions by exploring Aristophanes, Menander, Plautus, Terence, Moliere, Wilde, Chaplin, and modern musicals (and by visiting the Minnesota Opera to see Rossini’s Cinderella on stage!) 6 credits, AI, WR1, Fall-C. Polt
110. Introduction to Classical Studies This course will examine in depth the two most content-rich focal points of Classical antiquity--Periclean Athens and Early Imperial Rome--since they provide a context for so much of what Classics is about and, just as important, what different ages have imagined antiquity to be about. The course will cover Athens and Rome in roughly equal units, providing different perspectives on the material from the variety of approaches that currently make up the study of the Classics: history, archaeology, anthropology, gender studies, literary criticism, philology, religious studies, etc. 6 credits, HU, WR, HI, WR2, Winter-C. Hardy, K. Steed
112. The Epic in Classical Antiquity An introduction to the genre of epic poetry from Classical Antiquity. Students will read in translation examples from the Greek, Hellenistic, and Roman traditions in order to trace the development of the major features and themes of this genre and to understand the considerable influence this genre has exerted both during antiquity and thereafter. Authors will include Homer, Apollonius, Virgil, and Lucan. No prerequisites. 6 credits, AL; LA, Not offered in 2010-2011
114. Gender and Sexuality in Classical Antiquity In both ancient Greece and Rome, gender (along with class and citizenship status) largely determined what people did, where they spent their time, and how they related to others. This course will examine the ways in which Greek and Roman societies defined gender categories, and how they used them to think about larger social, political, and religious issues. Readings from epic, lyric, and drama, as well as ancient historical, philosophical, and medical writers. No prerequisites. 6 credits, HU, RAD; HI, Not offered in 2010-2011
116. Ancient Drama: Truth in Performance The tragic and comic stage offered the Greeks and Romans a public arena for addressing in an engaging way such fundamental topics as love, family, justice, and the divine. Although the written word has fortunately preserved for us many ancient plays, the proper media for their communication remains, as their authors intended, the stage, the voice, and the body. This course will therefore address a variety of ancient tragedies and comedies with special attention, not only to their themes, but to the manner of their staging and performance. 6 credits, $A L$; ARP, Fall-C. Hardy
117. Archaeology of Greece The course will concentrate on the Prehistoric Period in Greece, from the first arrival of man to the end of the Bronze Age. A major emphasis will be placed on the Minoan and Mycenaean Periods in Crete and Greece respectively. Along with the study of the culture of this period, the course will include a study of archaeological technique, so that the archaeological evidence can be evaluated. 6 credits, AL; HI, Spring-N. Wilkie
118. Archaeology of Greece: 1000-323 BCE This course surveys the material remains of Greek culture from the Early Iron Age through the Archaic and Classical Periods. Emphasis will be given to the development of art and architecture as material expressions of Greek culture, as well as to the physical and topographical definition of the Greek city-states and their institutions. 6 credits, AL; HI, Not offered in 2010-2011
125. Love, Death and Destiny: The Ancient Novel The novel is an unfamiliar but delightful area of Greek and Roman literature, with its heyday in the Roman empire of the second century AD. We will
study most of the nine Greek ones, which are romantic short novels about ill-fated lovers and their wild, world-wide adventures. We will also read the two Latin ones, Petronius' Satyricon and Apuleius' Metamorphoses, or Golden Ass, which are rich both in satire and an important spiritual dimension. No prerequisites. Read in English. 6 credits, AL; LA, Not offered in 2010-2011

## 227. Greek History: Greek World From the Rise of the City-State to the Rise of the Hellenistic

 Kingdom A survey of the civilization of the ancient Greeks, emphasizing the evolution of the city-state as a cohesive social, political, and economic organism. The development of the city-state as a response to the physical environment of Greece will form a component of this study, as will a discussion of the historical method: how do we use the few surviving archaeological remains and little written evidence to reconstruct the history of these people and their institutions? The period covered in depth will run from the beginning of the city-state ca. 750 BC to the conquests of Alexander the Great (336-323 BC) and the legacy of international monarchies that followed. 6 credits, HU; HI, IS, Spring-K. Steed228. Roman History, Republic and Principate Introduction to the basic facts of political history from the Etruscan period to the early third century AD. Readings in literary works and primary sources with emphasis on historiography and interpretation of evidence. Some attention to art and architecture. Prerequisite: one Carleton course in History, Classics, or Latin. 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
229. The Later Roman Empire, Byzantium and Islam Introduction to the basic facts of political history of the Roman, Byzantine, and Islamic empires from the third to the ninth centuries AD. Readings and discussion of primary texts from the points of view of social, intellectual, and particularly religious history. Some attention to art and architecture; individual projects of research and interpretation. An important goal is to understand the phenomena of Christianity and Islam in their native context, the Mediterranean world of late antiquity. Prerequisite: one Carleton course in history, classics, Greek or Latin. 6 credits, HU, RAD; HI, IS, Winter-J. Bryce
230. Junior Skills Portfolio A portfolio to be completed by majors in the Department of Classical Languages in the junior year, ensuring their preparation for the senior capstone experience. The portfolio will demonstrate specific skills using basic tools, as outlined in the majors' handbook. 2 credits, S/CR/NC, ND; NE, Winter-Staff
231. Senior Seminar As part of their senior capstone experience, majors in the classics department will formulate a call for papers developing the current year's theme for a colloquium, and following standard guidelines of the field produce proposals ("abstracts") for their own papers to be presented in the winter term. Prerequisite: Classics 295. 3 credits, ND; NE, Fall—Staff
232. Senior Symposium From proposals ("abstracts") developed in Classics 394, departmental majors will compose a twenty minute presentation to be delivered at a symposium on the model of professional conferences. The talks will then be revised into articles to be submitted to a journal of professional style, accepted and edited by the group into a presentable volume. Prerequisite: Classics 394 . 3 credits, $S / N C$, ND; NE, Winter-Staff

## Greek Courses (GRK)

(These courses all involve acquiring or using ancient Greek)
101. Elementary Greek Study of essential forms and grammar, with reading of connected passages. 6 credits, ND; NE, Winter-K. Steed
102. Intermediate Greek Study of essential forms and grammar, with reading of original, unadapted passages. Prerequisite: Greek 101 with a grade of at least C-. 6 credits, ND; NE, Spring-C. Polt
103. Greek Prose Selected prose readings. The course will emphasize review of grammar and include

Greek composition. Prerequisite: Greek 102 with a grade of at least C-. 6 credits, ND; NE, Fall-C. Polt
204. Greek Tragedy Selected readings from Greek Tragedy with an introduction to Greek meter.

Prerequisite: Greek 103 with a grade of at least C-. Completes the college foreign language requirement. 6 credits, ND; NE, Winter-C. Polt
230. Homer: The Odyssey Reading of selected portions in Greek and of the entire poem in translation. 6 credits, AL; LA, Not offered in 2010-2011
231. Homer: The Iliad Reading of selected portions in Greek and of the entire poem in translation. 6 credits, AL; LA, Fall-C. Hardy
233. Longus' Daphnis and Chloe Readings of selected portions of the novel in Greek and the entire text in translation. Prerequisites: Greek 204 or equivalent. 6 credits, AL; LA, Not offered in 2010-2011
244. Plato Symposium Readings of some of the most significant dialogues in translation, with selections in the original. Prerequisite: Greek 204. 6 credits, AL; HI, Not offered in 2010-2011
245. Herodotus Study in the original Greek of selections from Herodotus' Histories and in translation of the entire work. 3 credits, AL; HI, Not offered in 2010-2011
248. Ancient Greek Composition Practice in composing Greek prose. Prerequisites: Greek 103 or any higher-level Greek course. 3 credits, AL; NE, Not offered in 2010-2011
304. Greek Tragedy for Advanced Students Intensive study of one play in the original and the remaining plays in translation. Offered simultaneously with Greek 204, with additional assignments for the advanced students. Prerequisite: Greek 204. 6 credits, AL; LA, Winter-C. Polt
351. Aristophanes Intensive study of one or two plays in the original and of the remaining plays in translation. 6 credits, AL; LA, Not offered in 2010-2011
352. Thucydides Study in the original of selections from Thucydides Peloponnesian War and in translation of the entire work. Prerequisite: Greek 204. 6 credits, AL; HI, Spring—N. Wilkie
353. Greek Epigraphy Study of selected inscriptions in the original and others in translation.

Prerequisite: Greek 204. 3 credits, AL; HI, Not offered in 2010-2011

## Latin Courses (LATN)

(These courses all involve acquiring or using Latin)
101. Elementary Latin Study of essential forms and grammar. This course should be elected by all students who have taken less than two years of secondary school Latin or who have not studied the subject for two or more years before entering college. 6 credits, ND; NE, Fall-K. Steed
102. Intermediate Latin Continuation of essential forms and grammar. Prerequisite: Latin 101 with a grade of at least C-; or placement by examination during New Student Week. 6 credits, ND; NE, Winter-C. Polt
103. Catullus and Other Latin Poets Readings from the works of great poets in the original Latin, and of further selections in English. Prerequisite: Latin 102 with a grade of at least C-; or appropriate score on the Latin placement exam. 6 credits, ND; NE, Fall, Spring-C. Hardy
204. Latin Prose Review of essential forms and grammar, with introduction to Latin prose through the study of medieval texts, Cicero and elementary Latin prose composition. Prerequisite: Latin 103 with a grade of at least C-. Completes the college foreign language requirement. 6 credits, ND; NE, Fall-K. Steed
240. Lucretius Selections from the De Rerum Natura will be read in Latin, the remainder in translation.

In addition to examining the author's style and the poem's literary merits, we will study the tenets of Epicurean philosophy as expressed in the poem and thereby gain a greater appreciation of ancient thought about science, ethics and religion. 6 credits, AL; HI, Not offered in 2010-2011
241. Petronius and Apuleius Selections from the Satyricon and/or Golden Ass in the original as well as reading the entire works in English translation. 6 credits, AL; LA, Not offered in 2010-2011
242. Apuleius Selections from the Golden Ass in the original as well as reading the entire work in English translation. Prerequisite: Latin 204 or equivalent. 6 credits, AL; LA, Not offered in 2010-2011
243. Medieval Latin Reading from representative works of prose and poetry, and from the Roman liturgy. Prerequisite: Latin 204 or equivalent; students with a strong high school background of threefour years may also register upon taking the Latin placement exam. 6 credits, AL; LA, Fall-J. Bryce
245. Cicero Representative readings, in Latin, across the range of Cicero's literary activity, including oratory, philosophy, criticism, and correspondence. Prerequisite: Latin 204 or equivalent. 6 credits, AL; HI, Not offered in 2010-2011
248. Latin Composition Practice in composing Latin prose. Prerequisites: Latin 103 or any higher-level Latin course. 3 credits, AL; NE, Not offered in 2010-2011
254. Survey of the Latin Silver Age Readings from representative works of prose and poetry from the Silver Age of Latin literature. Authors will include Pliny, Juvenal, Seneca, Martial, Suetonius, and Tacitus. 6 credits, AL; HI, Not offered in 2010-2011
255. Tacitus A survey of the works of the Roman Silver Age historian and rhetorician Gaius Cornelius Tacitus, reading Latin excerpts and selections in English translation. Prerequisite: Latin 204 or equivalent. 6 credits, AL; HI, Not offered in 2010-2011
258. Seminar: Horace Selection from Horace's Odes, Epodes, Satires and Epistles in Latin and the remaining works in translation. Prerequisite: Latin 204 or equivalent. 6 credits, $A L ; L A$, Not offered in 2010-2011
259. Seminar: Virgil Selections from Eclogues, Georgics, and Aeneid in Latin and all of Virgil in English. Offered simultaneously with Latin 359 without the supplemental assignments for advanced students. 6 credits, AL; LA, Not offered in 2010-2011
345. Roman Comedy Selected readings in the original from Plautus and/or Terence; study in translation of both Roman Comedy and its predecessor Greek New Comedy. 6 credits, AL; LA, Winter - C. Hardy
347. Latin Love Poetry Reading the poetry of Catullus, Tibullus, Propertius, and Ovid in Latin, we will explore how different poets conceived of love by embracing or rejecting cultural, societal, and political expectations in first century BCE Rome. We will examine how Greek literature and thought influenced Roman ideas about love, as well as how Latin authors shaped the course of love poetry and songs in the West. We will also consider a range of topics related to love in antiquity, including sexuality, gender, courtship rituals, marriage, and children. Prerequisite: Latin 204 or equivalent. 6 credits, $A L ; L A$, Spring-C. Polt
359. Seminar: Virgil Selections from Eclogues, Georgics, and Aeneid in Latin and all of Virgil in English. Prerequisite: Latin 204 or equivalent. 6 credits, AL; LA, Not offered in 2010-2011

## COGNITIVE SCIENCE CONCENTRATION (CGSC)

## Director: Professor Kathleen M. Galotti

Cognitive Science examines different approaches to questions concerning the nature of mind, the representation of knowledge, the acquisition, comprehension, and production of language, the
development of learning and intelligence, the use of information to draw inferences and make decisions, and the assessment of "goodness of fit" between purportedly similar systems (e.g., the computer and the mind). Exploration of some or all of these questions has been and is being undertaken in such disciplines as cognitive psychology, linguistics, philosophy, intelligence, neuroscience, social cognition and others. The concentration in Cognitive Science therefore represents a formal means of bringing together students and faculty in different disciplines who share common interests. We seek to enrich the view provided by any one discipline through an exploration or the methodologies of others.

The concentration is designed for students majoring in psychology, philosophy, computer science, or linguistics, although all students are welcome.

## Requirements for the Concentration

Common Experience: (6 credits)
To encourage breadth within the concentration, normally no more than four courses taken from a single department or program may be counted toward the minimum eight required.

Core Courses: ( 26 credits- four six-credit courses plus one two-credit lab course)
CGSC 130 Introduction to Cognitive Science: Rationality, Intuition, and the Nature of Mind A second alternative entry point into the concentration is enrollment in the Biology-Philosphy DYAD--linked sections of Biology 125 and Philosophy 100. DYAD students may count successful completion as the equivalent of Cognitive Science 130.

CGSC/PSYC 232/233 Cognitive Processes and laboratory in Cognitive Processes ( 8 credits)
Plus any two of the following courses:
CS 111 Introduction to Computer Science
LING 115 Introduction to Theory of Syntax
PHIL 210 Logic
Elective Courses: 24 credits from the following list. At least one must be a 300 -level course.
To ensure sufficient interdisciplinarity, no more than four courses may be taken from any one department or program. (For the purposes of counting, the DYAD will count as part of the CGSC program.)

BIOL 365 Topics in Neuroscience
BIOL 368 Developmental Neurobiology (Not offered in 2010-2011)
BIOL 373 Behavioral Endocrinology (Not offered in 2010-2011)
BIOL 379 Seminar: Behavioral Genetics (Not offered in 2010-2011)
BIOL 386 Neurobiology
CGSC 236 Thinking, Reasoning and Decision-Making (Not offered in 2010-2011)
CGSC 380 Seminar in Developmental Psychology: Cognitive Development During the Preschool Years
CGSC 385 Cognitive Development in Middle Childhood (Not offered in 2010-2011)
CGSC 386 Adolescent Cognitive Development: Developing an Identity and Life Plans (Not offered in 2010-2011)
CS 254 Automata and Computability
CS 321 Artificial Intelligence (Not offered in 2010-2011)
CS 322 Natural Language Processing
EDUC 234 Educational Psychology
LING 216 Morpho-Syntax
LING 217 Phonetics and Phonology
LING 265 Language and Brain (Not offered in 2010-2011)
LING 275 First Language Acquisition
LING 315 Topics in Syntax
LING 317 Topics in Phonology

LING 325 Syntax of an Unfamiliar Language (Not offered in 2010-2011)
LING 340 Topics in Semantics
MUSC 227 Introduction to the Perception and Cognition of Music (Not offered in 2010-2011)
PHIL 100 Evolution and Mind
PHIL 110 Mind, Matter, Consciousness
PHIL 212 Epistemology
PHIL 220 Philosophy of Mind
PHIL 253 Philosophy of Cognitive Science (Not offered in 2010-2011)
PSYC 216 Behavioral Neuroscience
PSYC 220 Sensation and Perception (Not offered in 2010-2011)
PSYC 234 Psychology of Language
PSYC 250 Developmental Psychology
PSYC 258 Social Cognition
PSYC 373 Face Recognition
PSYC 374 Eyewitness Testimony in Children: Reconstructive Memory (Not offered in 2010-2011)
PSYC 375 Language and Deception (Not offered in 2010-2011)
SOAN 260 Myth, Ritual, and Symbolism
SOAN 274 Language, Culture and Society

## Cognitive Science Courses

130. Rationality, Intuition, and the Nature of Mind: An Introduction to Cognitive Science An interdisciplinary examination of issues involving thinking, reasoning, and decision-making; mental representation; language, perception, and the acquisition of new knowledge; and the development of learning and intelligence. The course will draw on relevant work from diverse fields such as artificial intelligence, cognitive psychology, philosophy, linguistics, anthropology, and neuroscience, and will provide an overview of the history and practice of the newly-emerging field of cognitive science. 6 credits, SS; SI, Offered in alternate years, Fall-K. Galotti
131. Cognitive Processes Crosslisted with PSYC.232. An introduction to the study of mental activity. Topics include attention, pattern recognition and perception, memory, concept formation, categorization, and cognitive development. Some attention to gender and individual differences in cognition, as well as cultural settings for cognitive activities. Prerequisite: Psychology 110 or permission of the instructor. Corequisite: Cognitive Sciences 233. A grade of C- or better must be earned in both Cognitive Science 232 and 233 to satisfy the LS requirement. 6 credits, $S S, W R ; L S$, WR2, Spring-K. Galotti
132. Laboratory Research Methods in Cognitive Science Crosslisted with PSYC.233. Students will participate in the replication and planning of empirical studies, collecting and analyzing data relevant to major cognitive phenomena. Prerequisite: Psychology 110 or permission of the instructor. Corequisite: Psychology 232. A grade of C- or better must be earned in both Cognitive Science 232 and 233 to satisfy the LS requirement. 2 credits, ND; LS, Spring-K. Galotti
133. Thinking, Reasoning and Decision-Making An examination of the way people think and reason, both when given formal laboratory tasks and when facing problems and decisions of everyday life. Students consider their own reasoning and decision-making through course exercises. Topics covered include: models of formal reasoning, decision-making, heuristics and biases in thinking and problemsolving, the development of reasoning ability, moral reasoning, improving thinking, problem-solving and reasoning skills. Prerequisite: Psychology 110 or consent of the instructor. 6 credits, SS; FSR, Not offered in 2010-2011
134. Seminar in Developmental Psychology: Cognitive Development During the Preschool Years We will consider the development of memory, perception, and attention, as well as concepts and categorization, problem-solving and thinking, during the years from two to six. We will focus
particularly on how these developments are reflected in children's spontaneous behavior and play. Course requirements will include readings, class discussions, short papers, a final project, and regular observation of preschoolers or kindergarteners. Prerequisites: Psychology 250 or Educational Studies 234 or permission of the instructor. 6 credits, SS; SI, Winter-K. Galotti
135. Cognitive Development in Middle Childhood We will consider the development of memory, perception, and attention, as well as concepts and categorization, problem-solving and thinking, during the years from six to 11 . We will focus particularly on how these developments are reflected in children's academic learning and social relationships. Course requirements will include readings, class discussions, short papers, a final project, and regular observation of school-aged children. Prerequisite: Psychology 250 or Educational Studies 234 or permission of instructor. 6 credits, SS; SI, Not offered in 2010-2011
136. Adolescent Cognitive Development: Developing an Identity and Life Plans An examination of recent literature on how adolescents develop their value system, explore their goals, begin to make lifeframing decision, establish new relationships, and discover answers to the question "Who am I?" Course readings will involve primary literature, and the course is discussion-based. Prerequisite: Psychology 250, Educational Studies 234 or consent of the instructor. 6 credits, SS; SI, Not offered in 2010-2011
137. Directed Research in Cognitive Studies Senior majors in cognitive studies will work with the director to develop a thesis proposal for their comps project. Prerequisite: Permission of the instructor. 3 credits, ND; NE, Fall—R. Elveton, K. Galotti

## COMPUTER SCIENCE (CS)

Chair: Professor Jeffrey R. Ondich<br>Professors: Jack Goldfeather, Jeffrey R. Ondich<br>Associate Professors: Amy Csizmar Dalal, David R. Musicant<br>Assistant Professors: Sherri Goings, David Liben-Nowell<br>Visiting Associate Professor: Joshua Davis

Computer Science studies the computational structures and processes that appear throughout the natural and human worlds. The study of those processes (known as algorithms) can lend insight into the functioning of our brains, the structure of our genes, the mechanisms by which people form communities, and many other questions in a wide range of disciplines. At the same time, an understanding of algorithms and the structure of data can help us create a tremendous variety of useful software tools. Carleton's computer science curriculum is designed to provide students with a balance between theoretical study and the practical application of theory to the design and construction of software.

Since computer science plays a key role in our world, we recommend Introduction to Computer Science (CS 111) for all Carleton students. We also offer introductory-level courses on specific topics, such as Life in the Age of Networks (CS 108).

Those who choose to major in computer science find many opportunities following graduation. Carleton Computer Science graduates who pursue employment in the computing industry find jobs in a many different roles and at a wide variety of companies. In addition to graduate programs in computer science, Carleton CS majors seeking further education have pursued graduate study in areas such as bioinformatics, linguistics, cognitive science, and law.

## Requirements for a Major

The course requirements are Mathematics 111; Computer Science 111, 201, 202 (or Mathematics 236), 204, 208, 251, 252, and 254; and two additional courses from among: Computer Science courses
numbered 200 or above, Mathematics 311, and Physics 247. Although they are not required for the CS major, we recommend that our students take as many mathematics and statistics courses as possible. In addition, each CS major in the class of 2011 must complete an integrative exercise (CS 400), for the class of 2012 the majors must complete a capstone experience (CS 399 and 400): during fall and winter terms of the senior year, the student will participate on a team of four to seven students working on a faculty-specified project. Potential majors should take Computer Science 111, Mathematics 111, and at least one of Computer Science 201, 202, 204, and 208 by the end of the sophomore year.

Students contemplating graduate study in computer science should consider taking additional courses in both mathematics (ideally the full Calculus sequence plus Mathematics 215 and 232) and computer science. Those interested in computer engineering should consider taking physics courses through Electricity and Magnetism and Electronics.

A guide for majors is available on the Computer Science Web site.

## Computer Science Courses

108. Life in the Age of Networks This course investigates how the social, technological, and natural worlds are connected, and how the study of networks sheds light on these connections. A network is a collection of entities linked by some relationship: people connected by friendships (e.g. Facebook); web pages connected by hyperlinks; species connected by the predator-prey relationships. We will emphasize the efficient synthesis and processing of large amounts of data in asking questions about networks in a variety of fields. Topics include: how Google works; "six degrees of separation"; species extinction; the spread of fads through society. No background in computer science or programming is required or expected. No prerequisites. Students who have received credit for Computer Science 111 or above are not eligible to enroll in Computer Science 108. 6 credits, MS; FSR, Offered in alternate years, Not offered in 2010-2011
109. Introduction to Computer Science This course will introduce you to computer programming and the design of algorithms. By writing programs to solve problems in areas such as image processing, text processing, and simple games, you will learn about recursive and iterative algorithms, complexity analysis, graphics, data representation, software engineering, and object-oriented design. No previous programming experience is necessary. Students who have received credit for Computer Science 201 or above are not eligible to enroll in Computer Science 111. No prerequisites. 6 credits, MS; FSR, QRE, Fall, Winter, Spring-Staff
110. Data Structures Think back to your favorite assignment from Introduction to Computer Science. Did you ever get the feeling that "there has to be a better/smarter way to do this problem?" The Data Structures course is all about how to store information intelligently and access it efficiently. How can Google take your query, compare it to billions of web pages, and return the answer in less than one second? How can one store information so as to balance the competing needs for fast data retrieval and fast data modification? To help us answer questions like these, we will analyze and implement stacks, queues, trees, linked lists, graphs and hash tables. Students who have received credit for a course for which Computer Science 201 is a prerequisite are not eligible to enroll in Computer Science 201. Prerequisite: Computer Science 111 or consent of the instructor. 6 credits, MS; FSR, QRE, Fall, Winter, Spring—Staff
111. Mathematics of Computer Science This course introduces some of the formal tools of computer science, using a variety of applications as a vehicle. You'll learn how to encode data so that when you scratch the back of a DVD, it still plays just fine; how to distribute "shares" of your floor's PIN so that any five of you can withdraw money from the floor bank account (but no four of you can); how to play chess; and more. Topics that we'll explore along the way include: logic and proofs, number theory, elementary complexity theory and recurrence relations, basic probability, counting techniques, and
graphs. Prerequisite: Computer Science 111 and Mathematics 111; or permission of instructor. 6 credits, MS; FSR, Winter-D. Liben-Nowell
112. Software Design It's easy to write a mediocre computer program, and lots of people do it. Good programs are quite a bit harder to write, and are correspondingly less common. In this course, we will study techniques, tools, and habits that will improve your chances of writing good software. While working on several medium-sized programming projects, we will investigate code construction techniques, debugging and profiling tools, testing methodologies, UML, principles of object-oriented design, design patterns, and user interface design. Prerequisite: Computer Science 111 or consent of the instructor. 6 credits, MS; FSR, Fall, Spring—A. Csizmar Dalal, J. Ondich
113. Computer Organization and Architecture Computer processors are extraordinarily complex systems. The fact that they work at all, let alone as reliably as they do, is a monumental achievement of human collaboration. In this course, we will study the structure of computer processors, with attention to digital logic, assembly language, performance evaluation, computer arithmetic, data paths and control, pipelining, and memory hierarchies. Prerequisites: Computer Science 111 or consent of the instructor. 6 credits, MS; FSR, Fall—A. Csizmar Dalal
114. Computer and Network Security Hackers, phishers, and spammers---at best they annoy us, at worst they disrupt communication systems, steal identities, bring down corporations, and compromise sensitive systems. In this course, we'll study various aspects of computer and network security, focusing mainly on the technical aspects as well as the social and cultural costs of providing (or not providing) security. Topics include cryptography, authentication and identification schemes, intrusion detection, viruses and worms, spam prevention, firewalls, denial of service, electronic commerce, privacy, and usability. Prerequisite: Computer Science 201, 202 or 204 or 208.6 credits, MS; FSR, Not offered in 2010-2011
115. Programming Languages What makes a programming language "like Python" or "like Java"? This course will look past superficial properties (like indentation) and into the soul of programming languages. We will explore a variety of topics in programming language construction and design: syntax and semantics, mechanisms for parameter passing, typing, scoping, and control structures. Students will expand their programming experience to include other programming paradigms, including functional languages like Scheme and ML. Prerequisite: Computer Science 201 or permission of instructor. 6 credits, MS; FSR, Fall-D. Liben-Nowell
116. Algorithms A course on techniques used in the design and analysis of efficient algorithms. We will cover several major algorithmic design paradigms (greedy algorithms, dynamic programming, divide and conquer, and network flow); applications of those techniques to a variety of domains (natural language processing, economics, computational biology, and data mining, for example); and computational complexity, particularly NP-completeness, including how to cope algorithmically when confronted with intractable problems. Prerequisites: Computer Science 201 and either Computer Science 202 or Mathematics 236.6 credits, MS; FSR, Winter-D. Liben-Nowell
117. Automata and Computability An introduction to the theory of computation, emphasizing an understanding of what problems can and cannot be solved by computers. Topics include formal models of computation, including finite-state automata, pushdown automata, and Turing machines; formal languages, including regular expressions and context-free grammars; and computability and uncomputability. Time permitting, we will discuss computational and mathematical applications, like parsing and Godel's incompleteness theorem. Prerequisites: Computer Science 201; Computer Science 202 or Mathematics 236.6 credits, MS; FSR, Spring-J. Ondich
118. Computer Graphics The raster graphics representation of 2- and 3-dimensional images. Topics include frame buffers, data structures for image storage, geometric transformations, hidden surface algorithms, raytracing, splines, and lighting models. Prerequisites: Computer Science 201, Mathematics

232 or consent of the instructor. 6 credits, MS; FSR, Offered in alternate years, Spring-J. Goldfeather
321. Artificial Intelligence How can we design computer systems with behavior that seems "intelligent?" This course will examine a number of different approaches to this question, including intelligent agents (simulated with a robot), machine learning (including neural networks and genetic algorithms), and reasoning with uncertainty. We will also examine search methods, with an interest in computer game playing. The coursework is a mix of problem solving and computer programming based on the ideas that we discuss. Prerequisite: Computer Science 201 or consent of the instructor. 6 credits, MS; FSR, Offered in alternate years, Not offered in 2010-2011
322. Natural Language Processing Computers are poor conversationalists, despite decades of attempts to change that fact. This course will provide an overview of the computational techniques developed in the attempt to enable computers to interpret and respond appropriately to ideas expressed using natural languages (such as English or French) as opposed to formal languages (such as C++ or Lisp). Topics in this course will include parsing, semantic analysis, machine translation, dialogue systems, and statistical methods in speech recognition. Prerequisites: Computer Science 201 and 202 or permission of the instructor. 6 credits, MS; FSR, Offered in alternate years, Fall-J. Ondich
324. Data Mining How does Google understand what it is you're looking for? How does Amazon.com figure out what items you might want to buy? These questions and others are part of machine learning and data mining, two highly related fields at the crossroads of artificial intelligence, database systems, and statistics. Machine learning concerns itself with getting a computer to learn or discover patterns, whereas data mining focuses this task on large databases. Much of the material will be presented through primary source research papers, and the content will include techniques such as classification, clustering, association rules, web mining, collaborative filtering, and others. Prerequisite: Computer Science 201 or consent of the instructor. 6 credits, MS; FSR, QRE, Offered in alternate years, SpringD. Musicant
331. Computer Networks The Internet is composed of a large number of heterogeneous, independently-operating computer networks that work together to transport all sorts of data to points all over the world. The fact that it does this so well given its complexity is a minor miracle. In this class, we'll study the structure of these individual networks and of the Internet, and figure out how this "magic" takes place. Topics include TCP/IP, protocols and their implementations, routing, security, network architecture, DNS, and emerging applications and technologies such as peer-to-peer networking, WiFi, and WiMax. Prerequisite: CS 201 or consent of instructor. 6 credits, MS; FSR, Offered in alternate years, Fall-A. Csizmar Dalal
332. Operating Systems The thing that we call a computer is actually a complex collection of interacting devices. To ensure that these devices work together effectively without excessive human intervention, people have developed operating systems software that coordinates the behavior of the devices and gives programmers ways to control those devices. This course will address the fundamental problems that operating systems need to solve, including those concerned with process management, file organization, memory management, and input/output control. We will also study the structure of the Linux operating system. Prerequisites: Computer Science 208 or consent of the instructor. 6 credits, MS; FSR, Offered in alternate years, Not offered in 2010-2011
334. Database Systems Database systems are used in almost every aspect of computing, from storing data for websites to maintaining financial information for large corporations. Intrinsically, what is a database system and how does it work? This course takes a two-pronged approach to studying database systems. From a systems perspective, we will look at the low-level details of how a database system works internally, studying such topics as file organization, indexing, sorting techniques, and query optimization. From a theory perspective, we will examine the fundamental ideas behind database systems, such as normal forms and relational algebra. Prerequisite: Computer Science 201 or consent of
the instructor. 6 credits, MS; FSR, Offered in alternate years, Not offered in 2010-2011
341. Cryptography If you want to send information that only your intended recipient can understand, you need cryptography, the art of securing messages. Cryptography is at the heart of applications like on-line commerce, password-protected computer accounts, secure wireless networks, and cash withdrawal from automatic teller machines. This course will focus on these and other applications to motivate our study of the mathematics, protocols, and history of cryptography and cryptanalysis. Prerequisite: Computer Science 201 and either Computer Science 202 or Mathematics 236, or permission of the instructor. 6 credits, MS; FSR, QRE, Offered in alternate years, Winter-J. Ondich
352. Advanced Algorithms A second course on designing and analyzing efficient algorithms to solve computational problems. We will survey some algorithmic design techniques that apply broadly throughout computer science, including discussion of wide-ranging applications. A sampling of potential topics: approximation algorithms (can we efficiently compute near-optimal solutions even when finding exact solutions is computationally intractable?); randomized algorithms (does flipping coins help in designing faster/simpler algorithms?); online algorithms (how do we analyze an algorithm that needs to make decisions before the entire input arrives?); advanced data structures; complexity theory. As time and interest permit, we will mix recently published algorithmic papers with classical results. Prerequisite: Computer Science 252 or permission of instructor. 6 credits, MS; FSR, Offered in alternate years, Spring-D. Liben-Nowell
361. Evolutionary Computing and Artificial Life An introduction to evolutionary computation and artificial life, with a special emphasis on the two way flow of ideas between evolutionary biology and computer science. Topics will include the basic principles of biological evolution, experimental evolution techniques, and the application of evolutionary computation principles to solve real problems. All students will be expected to complete and present a term project exploring an open question in evolutionary computation. Prerequisite: Computer Science 111; 201 or 204 or Biology 125. 6 credits, MS; FSR, Offered in alternate years, Winter-S. Goings
399. Senior Seminar As part of their senior capstone experience, majors will work together in teams (typically four to seven students per team) on faculty-specified topics to design and implement the first stage of a project. Required of all senior majors. Prerequisite: Senior standing, Mathematics 121, Computer Science 111, 201, 202 (or Mathematics 236); one course from among Computer Science 204 or 208; two courses from among Computer Science 251, 252 and 254; one course from among Computer Science courses numbered 260. 3 credits, $S / C R / N C$, ND; NE, Not offered in 2010-2011
400. Integrative Exercise Senior Computer Science majors work in teams (typically four to seven students per team) on faculty-specified topics. Required of all senior majors. Prerequisite: Senior standing, Mathematics 121, Computer Science 111, 201, 202 (or Mathematics 236); one course from among Computer Science 204 or 208; two courses from among Computer Science 251, 252 and 254; one course from among Computer Science courses numbered 260 or above or Mathematics 311.6 credits, S/NC, ND; NE, Fall, Winter-Staff

## Other Courses Pertinent to Computer Science:

Physics 247 Digital Electronics
Physics 343 Electronics

## CROSS-CULTURAL STUDIES CONCENTRATION (CCST)

Director: Professor Sigi D. Leonhard
Committee Members: Scott D. Carpenter, Clifford E. Clark, Jr., Van Dusenbery, Roger R. Jackson, Sigi D. Leonhard, Arjendu K. Pattanayak, Kathryn Sparling

The Cross-Cultural Studies Concentration objectives are: 1) to bring together American and international students in a program of study and interaction that will prepare them to live and work productively in a culture different from their own; 2) to provide a forum for studying problems and issues, such as pollution, disease, and human rights, that cut across traditional national or cultural boundaries and that tend to be excluded in traditional disciplines or area studies; 3) to enable students to come to a sharper understanding of their own and their academic focus culture by making comparisons explicit; 4) to create an arena for faculty whose work focuses on different parts of the world to address common issues and problems in a comparative, collaborative framework.

## Requirements for the Concentration:

Language is fundamental to understanding other societies and it is therefore fundamental to the concentration. Each concentrator will fulfill the Carleton language requirement in the language of the focus area, or will study in a language-intensive program in the focus area. Upper level language study is encouraged.

Concentrators will select a nation or region of the world on which to focus their cultural and linguistic study. This area will then be examined from three out of the following four perspectives:

In binary comparison with another culture
In regional perspective (i.e., beyond national borders)
In relation to global issues
Relating to ethnic diversity and diaspora
Core courses:
CCST 100: Growing Up Cross-Culturally (recommended but not required)
CCST 210: Global/Local Perspectives
CCST 275: I'm a Stranger Here Myself

## Electives:

Four courses from a least three of the four comparative categories listed above, to be selected from the list of pertinent courses available on the department Web site. Students who have participated in the first-year seminar, Growing Up Cross-Culturally, are required to take only three additional courses from any three categories.

American students will also participate in an approved international program (one or more terms), in an area where a language related to their focus is spoken. International students are exempt from this requirement since Carleton is an off-campus experience for them, but they are also encouraged to go off campus.

## Cross-Cultural Studies Courses

100. Growing Up Cross-Culturally First-year students interested in this program should enroll in this seminar. The course is recommended but not required for the concentration and it will count as one of the electives. From cradle to grave, cultural assumptions shape our own sense of who we are. This course is designed to enable American and international students to compare how their own and other societies view birth, infancy, adolescence, marriage, adulthood, and old age. Using children's books, child-rearing manuals, movies, and ethnographies, we will explore some of the assumptions in different parts of the globe about what it means to "grow up." 6 credits, $S / C R / N C, A I, W R 1, I S$, Fall-S.
Carpenter, S. Leonhard
101. Global/Local Perspectives How do global processes affect local cultures (and vice versa)? How do transnational movements of people, goods, capital, images and ideas affect identities? Is it really possible to translate, compare, and converse across cultures? Such questions animate this course, which aims to expose Cross-Cultural Studies concentrators, as well as interested students in related majors and concentrations, to theories and methods in the interdisciplinary field variously called global studies or
cross-cultural studies. To model interdisciplinary conversation and methods of inquiry, the course incorporates co-instructors and guest presenters from the humanities and social sciences and includes readings drawn from multiple disciplines. 6 credits, ND, RAD; SI, IS, Spring-V. Dusenbery, $\boldsymbol{R}$.

## Jackson

275. I'm A Stranger Here Myself Designed for students who are returning from off-campus studies or who have lived abroad, and for anyone who has had the experience of being an outsider, this course will explore theories and models of intercultural competence and intercultural transition. Using the actual experience of the students in class as its evidence, it will first develop theories about the nature of intercultural contact and then test their usefulness by applying them to the analysis of specific historical and literary evidence. 6 credits, ND, RAD; SI, IS, Winter-S. Leonhard

Pertinent courses are available in a wide range of disciplines, including: Art History, Economics, History, Music, Area Studies, Political Science, Religion, and Sociology and Anthropology. For questions about particular courses, please check the department Web site or contact the director.

## Binary Comparison:

ARTS 275 Studio Art Seminar in the South Pacific: Physical/Cultural Environment of Australia and New Zealand
FREN 235 Francophone Literature of Africa and the Caribbean
POSC 326 America's China Policy*

## Regional Perspective:

AMST 240 The Midwest and the American Imagination (Not offered in 2010-2011)
ARTH 164 Buddhist Art (Not offered in 2010-2011)
BIOL 210 Global Change Biology
ENGL 238 African Literature in English
FREN 241 The Lyric and Other Seductions
HEBR 221 Israeli Literature in the Middle East
HEBR 222 Discovering Literary Tel Aviv and Jerusalem (Not offered in 2010-2011)
HIST 137 Before Europe: The Early Medieval World, 250-c. 1050 (Not offered in 2010-2011)
HIST 139 Foundations of Modern Europe (Not offered in 2010-2011)
HIST 140 Modern Europe 1789-1914
HIST 141 Europe in the Twentieth Century (Not offered in 2010-2011)
HIST 169 Colonial Latin America 1492-1810 (Not offered in 2010-2011)
HIST 170 Modern Latin America 1810-Present
HIST 180 An Historical Survey of East Africa (Not offered in 2010-2011)
HIST 182 A Survey of Southern African History (Not offered in 2010-2011)
HIST 204 Crusade, Contact and Exchange in the Medieval Mediterranean (Not offered in 20102011)

HIST 232 Renaissance Worlds in France and Italy
HIST 233 Cultures of Empire: Byzantium, 710-1453
HIST 236 Women's Lives in Pre-Modern Europe (Not offered in 2010-2011)
HIST 259 Women in South Asia: Histories, Narratives, and Representation (Not offered in 20102011)

HIST 260 The Making of the Modern Middle East (Not offered in 2010-2011)
HIST 265 Central Asia in the Modern Age (Not offered in 2010-2011)
HIST 283 Farm and Forest: African Environmental History (Not offered in 2010-2011)
LTAM 200 Issues in Latin American Studies
POSC 221 Latin American Politics (Not offered in 2010-2011)
POSC 241 Ethnic Conflict
POSC 255 Post-Modern Political Thought

POSC 263 European Political Economy
POSC 322 Political Economy of Latin America* (Not offered in 2010-2011)
POSC 383 European Political Economy Seminar in Madrid and Maastricht: Politics of the European Union
RELG 150 Religions of South Asia
RELG 251 Theravada Buddhism (Not offered in 2010-2011)
RELG 253 Tibetan Buddhism
SOAN 250 Ethnography of Latin America (Not offered in 2010-2011)
SOAN 256 Ethnography of Africa (Not offered in 2010-2011)
SOAN 259 Comparative Issues in Native North America
SPAN 238 Images of the Indian in Spanish American Literature (Not offered in 2010-2011)
SPAN 242 Introduction to Latin American Literature
SPAN 255 Women Dramatists in Latin America: Staging Conflicts (Not offered in 2010-2011)
SPAN 260 Forces of Nature (Not offered in 2010-2011)
SPAN 336 Genealogies of the Modern: Turn of the Century Latin America

## Global Issues:

BIOL 210 Global Change Biology
BIOL 212 Australia Program: Biology Field Studies and Research (Not offered in 2010-2011)
BIOL 221 Ecosystem Ecology
BIOL 352 Population Ecology
BIOL 361 Tropical Rainforest Ecology
CHEM 328 Environmental Analysis
ECON 224 Cambridge Program: British Cultural Exports
ECON 245 Economics of Inequality (Not offered in 2010-2011)
ECON 281 International Finance
ENTS 112 Conservation Biology (Not offered in 2010-2011)
ENTS 215 Environmental Ethics
ENTS 244 Conservation and Development in Tanzania: Biodiversity Conservation and Development
HIST 360 Muslims and Modernity (Not offered in 2010-2011)
MUSC 111 Western Art Music and Western Civilization
MUSC 210 Medieval and Renaissance Music (Not offered in 2010-2011)
MUSC 245 Music of Africa
PHIL 242 Environmental Ethics (Not offered in 2010-2011)
POSC 120 Comparative Political Regimes
POSC 255 Post-Modern Political Thought
POSC 259 Justice Among Nations (Not offered in 2010-2011)
POSC 265 Politics of Global Economic Relations (Not offered in 2010-2011)
POSC 268 International Environmental Politics and Policies (Not offered in 2010-2011)
POSC 281 Global Society: An Approach to World Politics (Not offered in 2010-2011)
POSC 355 Identity, Culture and Rights*
POSC 358 Comparative Social Movements*
POSC 360 Political Economy Seminar*
PSYC 384 Psychology of Prejudice
RELG 111 Judaism, Christianity, Islam (Not offered in 2010-2011)
RELG 121 Introduction to Christianity
RELG 227 Liberation Theologies (Not offered in 2010-2011)
RELG 258 Women and Buddhism (Not offered in 2010-2011)
RELG 263 Sufism
SOAN 226 Anthropology of Gender (Not offered in 2010-2011)
SOAN 234 Ecology, Economy, and Culture

SOAN 262 Anthropology of Health and Illness (Not offered in 2010-2011)
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2010-2011)
Ethnic Diversity and Diaspora:
AMST 115 Introduction to American Studies: The Immigrant Experience
AMST 115 Introduction to American Studies: Placing Identities
AMST 127 Introduction to U.S. Latino/a Studies
AMST 239 Introduction to Asian American Studies (Not offered in 2010-2011)
EDUC 353 Schooling and Opportunity in American Society
ENGL 119 Introduction to U.S. Latino/a Literature (Not offered in 2010-2011)
ENGL 235 Asian American Literature (Not offered in 2010-2011)
ENGL 258 Contemporary American Playwrights of Color
FREN 243 Cultural Reading
HIST 276 The African Diaspora in Latin America (Not offered in 2010-2011)
HIST 322 Civil Rights and Black Power (Not offered in 2010-2011)
HIST 360 Muslims and Modernity (Not offered in 2010-2011)
POSC 355 Identity, Culture and Rights*
PSYC 384 Psychology of Prejudice
RELG 130 Native American Religions
RELG 243 Native American Religious Freedom
RELG 271 Religious and Moral Issues of the Holocaust
SOAN 259 Comparative Issues in Native North America
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2010-2011)
SPAN 238 Images of the Indian in Spanish American Literature (Not offered in 2010-2011)
SPAN 326 Writers in Exile (Not offered in 2010-2011)
SPAN 340 Latin American Prose: Dictatorships and Revolution in the Latin American Narrative (Not offered in 2010-2011)
SPAN 344 Women Writers in Latin America: Challenging Gender and Genre (Not offered in 20102011)

SPAN 350 Recent Trends in Latin American Narrative: Pop Culture and Testimony

## EAST ASIAN STUDIES CONCENTRATION

## Director: Professor Mark Hansell

With the world's most populous nation and some of its largest economies, East Asia is a region of growing significance. It consists of areas encompassed by present day China, Japan, and Korea (and sometimes also Mongolia, Myanmar, Siberia, and Vietnam). The concentration consists of a program of study combining language training, off-campus study, required core courses in various disciplines, and supporting courses, including a designated capstone course. The underlying logic of the concentration seeks to highlight both the similarities and differences in the societies and cultures of East Asia and to generate increased understanding of a vital part of the modern world.

## Requirements for the Concentration:

The East Asian Studies Concentration requires a total of 42 credits, with at least 6 credits drawn from each of the three Asian Studies distribution areas (Arts and Literature, Humanities, Social Sciences)

18 credits in core courses, drawn from at least two of the three Asian Studies distribution areas
24 credits from additional courses, drawn from at least two of the three Asian Studies distribution areas, and including a designated East Asia-related capstone course.

Courses taken on off-campus programs may be applied to the concentration.

Language courses below 228 may not be applied.
Normally, at least one term of off-campus study in East Asia
One year of study of an East Asian language, or its equivalent. For languages offered at Carleton, this will involve completion of a language through 103, or its equivalent. For languages not offered at Carleton, it will involve completion of the equivalent of 103.

Core Courses: 18 credits from among the following; courses must be from at least two distribution areas

ARTH 165 Japanese Art and Culture (Not offered in 2010-2011)
ARTH 166 Chinese Art and Culture
CHIN 282 Tianjin Program: Chinese Civilization
HIST 151 History of Modern Japan (Not offered in 2010-2011)
HIST 152 History of Imperial China
HIST 153 History of Modern China
JAPN 237 Literature and Arts of Japan: 1333-1868 in Translation (Not offered in 2010-2011)
JAPN 240 Literature and Society of Modern Japan in Translation
RELG 151 Religions in Chinese Culture
RELG 152 Religions in Japanese Culture (Not offered in 2010-2011)
SOAN 284 Anthropology of China (Not offered in 2010-2011)
SOAN 286 Anthropology of East Asia (Not offered in 2010-2011)
Supporting Courses: 24 credits from among the following; courses must be from at least two distribution areas.

ARTH 164 Buddhist Art (Not offered in 2010-2011)
ARTH 209 Chinese Painting
ARTH 220 Gender and Genre in the Floating World: Japanese Prints (Not offered in 2010-2011)
ARTH 320 Japanese Theater: Visualizing Narrative Across Media
ASLN 111 Writing Systems
ASLN 237 Tao of Wisdom in Asian Literature (Not offered in 2010-2011)
ASLN 260 Historical Linguistics (Not offered in 2010-2011)
CHIN 115 The Taoist Way of Health and Longevity, Taichi and Other Forms (Not offered in 2010-2011)

CHIN 212 Tianjin Program: Chinese Culture
CHIN 235 Beauty, Good and Evil in Chinese Literature (Not offered in 2010-2011)
CHIN 240 Chinese Cinema (Not offered in 2010-2011)
CHIN 248 The Structure of Chinese (Not offered in 2010-2011)
CHIN 347 Advanced Reading in Contemporary Chinese Prose: Newspapers (Not offered in 2010-2011)

CHIN 349 Advanced Chinese: Social Commentary (Not offered in 2010-2011)
CHIN 350 Advanced Chinese: Poems and Stories (Not offered in 2010-2011)
CHIN 356 Modern and Contemporary Women Writers (Not offered in 2010-2011)
CHIN 358 Chinese Idiom Stories (Not offered in 2010-2011)
CHIN 360 Classical Chinese (Not offered in 2010-2011)
ECON 240 Microeconomics of Development
HIST 253 Bureaucracy, Law and Religion in East Asia (Not offered in 2009-2010)
HIST 254 Colonialism in East Asia
HIST 255 Press and Culture in East Asia
JAPN 230 Topics in Pre-Modern Literature in Translation (Not offered in 2010-2011)
JAPN 231 Japanese Cinema in Translation (Not offered in 2010-2011)
JAPN 232 Autobiography in Modern Japan in Translation (Not offered in 2010-2011)
JAPN 234 Modern Japanese Novel in Translation: Mothers/Daughters Fathers/Sons (Not offered in 2010-2011)

JAPN 236 Classical Japanese Fiction: The Tale of Genji and Its World in Translation
JAPN 242 Japanese Poetry in Translation (Not offered in 2010-2011)
JAPN 243 The Other in Modern Japanese Literature and Society in Translation (Not offered in 2010-2011)

JAPN 345 Advanced Reading in Modern Japanese Literature: The Short Story
JAPN 346 Advanced Readings in Modern Japanese Literature: Poetry and Drama (Not offered in 2010-2011)

JAPN 347 Advanced Reading in Contemporary Japanese Prose: Newspapers (Not offered in 2010-2011)

JAPN 348 Advanced Conversation and Composition (Not offered in 2010-2011)
JAPN 349 Advanced Readings in Contemporary Japanese Prose (Not offered in 2010-2011)
JAPN 351 Advanced Japanese through Documentary Film (Not offered in 2010-2011)
JAPN 352 Advanced Japanese Through Manga and Contemporary Materials
POSC 239 The Diplomat's Craft: Three Case Studies (Not offered in 2010-2011)
POSC 326 America's China Policy
POSC 329 Vietnam, Iraq War and American Policy (Not offered in 2010-2011)
POSC 345 Guerillas, Warlords and Bandits: The Art of Asymmetric War (Not offered in 2010-
2011)

POSC 378 Beijing Program: Chinese Social and Political Institutions (Not offered in 2010-2011)
POSC 379 Beijing Program: Chinese Decision Making (Not offered in 2010-2011)
POSC 381 Beijing Program: Political Economy of China (Not offered in 2010-2011)
POSC 382 Beijing Program: Chinese Economics in Transition (Not offered in 2010-2011)
RELG 255 Social Engagement in Asian Religions (Not offered in 2010-2011)
RELG 258 Women and Buddhism (Not offered in 2010-2011)
RELG 350 Emptiness
RELG 358 Zen, Nationalism and Orientalism (Not offered in 2010-2011)
Capstone Course: For 2010-2011, the designated capstone course is: to be announced

## ECONOMICS (ECON)

Chair: Professor Stephen H. Strand<br>Professors: Michael Hemesath, Mark T. Kanazawa, Martha White Paas, Stephen H. Strand, Jenny Bourne Wahl<br>Associate Professor: Nathan D. Grawe<br>Assistant Professors: Muhammad Faress Bhuiyan, Lauren Feiler, Pavel Kapinos, Aaron M. Swoboda, Radek Szulga<br>Visiting Instructors: Clinton J. Pecenka, Melissa K. Whitler

Economics analyzes the ways in which resources can be most effectively organized to meet the changing goals of a society. Courses in the department combine theoretical and applied economics as a basis for developing and evaluating alternative public policies for entire economies and for the institutions and organizations within an economy. Department courses give a broad and practical perspective for those considering careers in law, government, business, education, journalism or social service; they also meet the needs of students seeking graduate work in economics, business administration, and public affairs. The basic introductory courses, 110 and 111, are prerequisites to most advanced courses; they offer a good foundation for further work in economics, but they have also been designed for students who have not yet selected majors and for those in other majors seeking an introduction to the analysis of economic theory and policies. Note: Either course in the principles sequence, Economics 110 or 111, can be taken first. Independent study (291 or 391) for those with
special research interests can be taken with any faculty member.

## Requirements for a Major

All economics majors are required to successfully complete the two introductory courses (110 and 111), the three core courses ( 330,331 , and 332), the integrative exercise (400), and 30 additional credits in economics at the 200 level or above. Unless specifically noted otherwise, all economics courses at the 200 -level and above have both Economics 110 and 111 as prerequisites. Mathematics 215 (or 275) is a prerequisite for 332 and is also required.

Mathematics 111 or its equivalent is a prerequisite for Economics 330. Any student intending graduate work in economics should also take Mathematics 121, 211, and 232. Courses teaching additional skills such as computer science, advanced rhetoric, and analysis of political and social policies are highly recommended.

## Economics Courses

100. Catastrophe Catastrophes have the potential to destroy large parts of life on earth. For example, the Black Death, the possibility of a pandemic, a collision with an asteroid or irreversible climate change. We will examine several catastrophes from an interdisciplinary perspective that will meld the insights of lawyers, economists, psychologists and other social sciences with those of researchers in the physical sciences. We will consider why the public and policymakers often ignore such risks and what concrete ways of response are possible. What will they cost in terms of national sovereignty or civil liberties. 6 credits, AI, WR1, Fall—M. Paas
101. Principles of Macroeconomics This course gives students a foundation in the general principles of economics as a basis for effective citizenship and, when combined with 111, as a preparation for all advanced study in economics. Topics include analysis of the measurement, level, and distribution of national income; the concepts of inflation and depression; the role and structure of the banking system; fiscal and monetary stabilization techniques; implications of and limits to economic growth; and international economic relations. 6 credits, SS; SI, QRE, Fall, Winter, Spring-P. Kapinos, M. Paas, S. Strand, R. Szugla
102. Principles of Microeconomics This course gives the students a foundation in the general principles of economics as a basis for effective citizenship and, when combined with 110, as a preparation for all advanced study in economics. Topics include consumer choice theory; the formation of prices under competition, monopoly, and other market structures; the determination of wages, profits, and income from capital; the distribution of income; and an analysis of policy directed towards problems of public finance, pollution, natural resources, and public goods. 6 credits, SS; SI, QRE, Fall, Winter, Spring-F. Bhuiyan, A. Swoboda, J. Wahl, M. Whitler
103. Cambridge Program: Contemporary British Economy This course will focus on the theoretical and policy debates in Britain from the 1930s to the present and the development of the structure of the British economy and institutions during that period. Prerequisites: Economics 110 and 111.4 credits, SS; SI, Summer—L. Feiler
104. Cambridge Program: The Industrial Revolution in Britain This course studies the development of the British economy during the Industrial Revolution, with special attention paid to the role of agriculture, foreign trade, capital accumulation, population growth, and technological innovation. The week-long trip to sites of the Industrial Revolution and excursions to other locations of historical significance are important aspects of this course. Prerequisites: Economics 110 and 111. 6 credits, SS; SI, Summer-L. Feiler
105. Cambridge Program: The Life of J. M. Keynes This course will examine the life and times of J. M. Keynes. In addition to studying the economic ideas of Keynes, students will examine the social and
political milieu in Britain in the first half of the twentieth century. 4 credits, $S / C R / N C$, SS; SI, SummerL. Feiler
106. Cambridge Program: British Cultural Exports This course will examine cultural and artistic organizations in Great Britain, with a particular focus on the influence of British culture on other parts of the world. Students will study the unique economic properties of creative enterprises and consider how the literature, music, and television of Great Britain have had a pervasive impact overseas. Prerequisite: Economics 110 and 111.4 credits, SS; SI, Summer-L. Feiler
107. American Economic History: A Cliometric Approach An introduction to the growth of the American economy from colonial times to the present with emphasis on the nineteenth century. Topics include technical change, the choice of production technology, income distribution, demographic transition, factor markets, and the role of institutions. Debates in economic history such as the economic viability of antebellum slavery, the integration of capital markets, the role of railroads in the growth process, and the economic impact of the New Deal are evaluated with an emphasis on empirical evidence. May be counted toward the History major. Prerequisites: Economics 110 and 111.6 credits, SS, WR; SI, WR2, QRE, Not offered in 2010-2011
108. European Economic History A comparative study of dynamic economic components in the growth of western European countries, with particular attention to Great Britain, from the sixteenth to the twentieth century. Topics include the methodology of economic history, agriculture, technology, population, foreign trade, the role of the state, and monetary systems. Prerequisites: Economics 110 and 111.6 credits, SS, WR; SI, WR2, IS, QRE, Winter-M. Paas
109. Economics of the European Union The evolution of economic and monetary union in Europe has been underway for over 50 years. This course examines the economics of the customs union, common market, and monetary union that characterize this period in European history. Microeconomic aspects of European labor, capital and product markets, as well as national monetary and fiscal policies are discussed. Emphasis is given to tracing in an historical context the economic theories and polices that have been central in creating the present state of the European Union. Prerequisites: Economics 110 and 111.6 credits, SS; SI, IS, QRE, Spring-S. Strand
110. Microeconomics of Development This course explores household behavior in developing countries. We will cover areas including fertility decisions, health and mortality, investment in education, the intra-household allocation of resources, household structure, and the marriage market. We will also look at the characteristics of land, labor, and credit markets, particularly technology adoption; land tenure and tenancy arrangements; the role of agrarian institutions in the development process; and the impacts of alternative politics and strategies in developing countries. The course complements Economics 241. Prerequisites: Economics 110 and 111.6 credits, SS; SI, IS, QRE, Fall-F. Bhuiyan
111. Growth and Development Macroeconomic issues, such as growth and distribution, that arise within developing countries will be examined in this course. The course complements Economics 240. Prerequisite: Economics 110 and 111.6 credits, SS; SI, IS, QRE, Spring—R. Szulga
112. Economics of Education This course investigates economic issues related to education. The course incorporates both theoretical and empirical works to provide a better understanding of how economists view the educational problems that persist in different countries. The course covers a wide range of topics including literature on human capital formation, returns to education, private and charter schools, early childhood programs, and educational problems in developing countries. Prerequisites: Economics 110 and 111. 6 credits, SS; SI, QRE, Not offered in 2010-2011
113. Economic Demography This course explores topics in population studies, or demography, from an economic perspective. Core demographic variables, such as fertility, mortality, and migration, are both consequences and determinants of economic factors. We will cover basic demographic concepts and
measures, and we will use economic theory to understand the relationship between economics and demography. Potential topics covered include: the dynamics of fertility and child bearing decisions, marriage markets, migration, household composition, intergenerational mobility, and societal shifts in age structure. Prerequisites: Economics 110 and 111. 6 credits, SS; SI, QRE, Not offered in 2010-2011
114. Economics of Inequality As economies develop beyond the point of meeting basic needs, more emphasis is placed on the distribution of resources. This course surveys different elements and measures of economic inequality. We look at race and gender discrimination, industry wage differentials, educational inequality, and changes in inequality within these groups. Because the effects of inequality can be mitigated by movements between economic classes, we also study mobility both within and across generations. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Not offered in 20102011
115. History of Economic Ideas A survey of the evolution of economic thought from the seventeenth century to the present, with emphasis on the intellectual and historical background which influenced economists. Prerequisites: Economics 110 and 111.6 credits, SS, WR; SI, WR2, Not offered in 20102011
116. The Economics of the Arts and Culture This course examines the growth and structure of the arts in the United States since the 1920s. Using the theory of contracts and the logic of economic organization, we will examine the creative industries and the properties that make them special. We will also examine the theory of public goods and of intellectual property rights along with the study of cultural industries, public policy for the arts and cultural heritage preservation. Students will have the opportunity to study one cultural industry in a research paper. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Spring—M. Paas
117. Managerial Economics I Managerial Economics provides students with the opportunity to apply knowledge of micro- and macro-economic principles to decision-making in the real world. This course emphasizes accounting and the accounting systems which provide data to decision-makers, giving particular attention to the relevance of accounting data to economic decision-making. An introduction to spreadsheet program will be an integral part of the course, which concludes with an introduction to some basic decision-making techniques (e.g. break-even analysis, naive forecasting models) that use accounting data. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Fall—S. Strand
118. Managerial Economics II This course continues the student's introduction to practical decisionmaking techniques used by economists and managers. Building on material presented in Economics 260, topics surveyed in this course include demand and cost curve analysis as well as the implications of alternative pricing and production choices. Among the analytical techniques used are linear programming, econometrics, calculus, and game theory. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Winter-S. Strand
119. The Economics of Sports In recent years, the sports business in the United States has grown into a multibillion-dollar industry. Understanding the sports business from an economic viewpoint is the subject of this course. Topics will include player compensation, revenue-sharing, salary caps, free agency, tournaments, salary discrimination, professional franchise valuation, league competitiveness, college athletics, and the economics of sports stadiums and arenas. Prerequisites: Economics 110 and 111. 6 credits, SS; SI, QRE, Not offered in 2010-2011
120. Health Economics An economic analysis of the nature of demand for different types of health services, the supply of health services, the supply of those services by different providers, the health care industry, market failures in providing health care, and alternative health care delivery systems. Proposals for national health insurance will be discussed. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Not offered in 2010-2011
121. Game Theory and Economic Applications Game theory is the study of purposeful behavior in strategic situations. It serves as a framework for analysis that can be applied to everyday decisions, such as working with a study group and cleaning your room, as well as to a variety of economic issues, including contract negotiations and firms' output decisions. In this class, modern game theoretic tools will be primarily applied to economic situations, but we will also draw on examples from other realms. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Spring—M. Whitler
122. Experimental Economics Controlled experiments are a useful tool for testing and improving upon economic theory. This course will provide an introduction to experimental methodology, with an emphasis on design and hypothesis testing. We will examine experimental results across a wide range of economic topics, including individual decision making, auctions, public goods, and asset markets. Students will participate in experiments, as well as design and conduct their own studies. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Fall-C. Pecenka
123. Behavioral Economics Why do some observations of consumer behavior contradict the predictions of economic theory? By combining psychological and economic models of behavior, behavioral economists develop alternatives to standard economic theory to explain observed behavioral anomalies. This course will examine questions such as whether addictions can be considered rational, why people hold losing stocks longer than theory predicts, why most dieters are unsuccessful and why people don't save enough money for retirement. Topics covered may include expected utility theory, bounded rationality, prospect theory, hyperbolic discounting and rational addiction. 6 credits, $S S$; $S I$, QRE, Winter-M. Whitler
124. Economics of Cost Benefit Analysis Cost-benefit analysis is a tool commonly used by economists and policy makers to compare and choose among competing policy options. This course will cover the basic theory and empirical techniques necessary to quantify and aggregate the impacts of government policy, especially as related to the environment. Topics covered include the time value of money; uncertainty; sensitivity analysis; option value; contingent valuation; hedonic estimation; basic research design. Throughout the course case studies will be used to elucidate and bring life to the theoretical concepts. Some statistics background will be useful. 6 credits, SS; SI, QRE, Winter-A. Swoboda
125. Economics of the Public Sector This course provides a theoretical and empirical examination of the government's role in the U.S. economy. Emphasis is placed on policy analysis using the criteria of efficiency and equity. Topics include rationales for government intervention; analysis of alternative public expenditure programs from a partial and/or general equilibrium framework; the incidence of various types of taxes; models of collective choice; cost-benefit analysis; intergovernmental fiscal relations. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Not offered in 2010-2011
126. Economics of Natural Resources and the Environment This course focuses on environmental economics, energy economics, and the relationship between them. Economic incentives for pollution abatement, the industrial organization of energy production, optimal depletion rates of energy sources, and the environmental and economic consequences of alternate energy sources are analyzed. Prerequisite: Economics 111.6 credits, SS; SI, QRE, Winter-A. Swoboda
127. Water and Western Economic Development This course examines a number of important aspects of water as a legal/political/economic factor in the development of the western United States. The topics include western water law, the evolution of water supply institutions, state and local water planning, the role of the federal government, and a number of current water problems, including surface and groundwater pollution, impediments to market transfers of water, and state/regional/international conflicts over water. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Spring-M.

## Kanazawa

274. Labor Economics Why do some people choose to work and others do not? Why are some people paid higher wages than others? What are the economic benefits of education for the individual and for
society? How do government policies, such as subsidized child care, the Earned Income Tax Credit and the income tax influence whether people work and the number of hours they choose to work? These are some of the questions examined in labor economics. This course will focus on the labor supply and human capital decisions of individuals and households. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Spring-F. Bhuiyan
275. Law and Economics Legal rules and institutions influence people's behavior. By setting acceptable levels of pollution, structuring guidelines for contract negotiations, deciding who should pay for the costs of an accident, and determining punishment for crimes, courts and legislatures create incentives. How do economic considerations factor into legal rules, and how do laws affect economic output and distribution? In this class, we use court cases, experiments, and current legal controversies to explore such issues. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Spring—J. Wahl
276. Money and Banking This course examines the role of money and monetary institutions in determination of income, employment, and prices in domestic and world economy. It also examines the role of commercial banking and financial markets in a market-based economy. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Not offered in 2010-2011
277. Industrial Organization and Firm Behavior This course analyzes the firm's marketing and pricing problems, its conduct, and the resulting economic performance, given the nature of the demand for its products, its buying markets, the nature of its unit costs, and the structure of its selling markets. Prerequisites: Economics 110 and 111. 6 credits, SS; SI, QRE, Not offered in 2010-2011
278. International Trade A study of international trade theories and their policy implications. Classical and neo-classical trade models, the gains from trade, the terms of trade and the distribution of income, world trade patterns, international factor movements, tariffs, and the impact of commercial policy on developing and developed countries are analyzed. Prerequisites: Economics 110 and 111.6 credits, $S S$; SI, QRE, Fall-M. Hemesath
279. International Finance This course studies theories of the multi-faceted interaction between the balance of international payments and foreign exchange market and the general levels of domestic prices, employment and economic activity. Topics include the balance of payments, foreign exchange markets, adjustment mechanisms in international payments, macroeconomic policies for internal and external balance, and international monetary systems. Prerequisites: Economics 110 and 111.6 credits, SS; SI, QRE, Winter-R. Szulga
280. Investment Finance The main objective of this course is to investigate various aspects of modern investment theory and develop basic techniques for applying this theoretical framework to the realworld data. Topics covered include: portfolio and asset pricing theories; fixed-income security management; derivatives with the primary focus on option pricing. The class will develop and actively use univariate calculus for theory-building and statistical techniques for data analysis. 6 credits, SS; SI, QRE, Not offered in 2010-2011
281. Intermediate Price Theory An analysis of the forces determining relative prices within the framework of production and distribution. This class is normally taken by juniors. Sophomores considering enrolling should speak to the instructor. Prerequisites: Economics 110 and 111, Mathematics 111 or its equivalent. 6 credits, SS; SI, QRE, Fall, Winter-J. Wahl
282. Intermediate Macro Theory Analysis of the forces determining the general level of output, employment, and prices with special emphasis on the role of money and on interest rate determination. This class is normally taken by juniors. Sophomores considering enrolling should speak to the instructor. Prerequisites: Economics 110 and 111, 330 or consent of instructor. 6 credits, SS; SI, QRE, Winter, Spring-P. Kapinos
283. Econometrics This course is an introduction to the statistical methods used by economists to test
hypotheses and to study and quantify economic relationships. The course emphasizes both statistical theory and practical application through analysis of economic data sets using statistical software. Topics include two-variable and multiple regression, interval estimation and hypothesis testing, discrete and continuous structural change, parameter restrictions, model construction, heteroscedasticity, autocorrelation, and multicollinearity. This course is normally taken by juniors. Sophomores considering enrolling should speak to the instructor. Prerequisite: Mathematics 111 and either Mathematics 215 or 275. Prerequisites: Economics 110 and 111. 6 credits, SS; SI, QRE, Fall, Spring—M. Kanazawa, A. Swoboda
284. Advanced Topics in Labor Economics Labor economics is the study of work and pay. It encompasses a wide variety of topics, including the nature of the labor contract, human capital investment, fringe benefits, search and hiring, turnover, working conditions, discrimination, union activities, income and wealth distribution, and government policies. The seminar considers labor market activities within the larger context of general household decision-making about family formation, the timing of marriage and childbirth, and the allocation of unpaid household work among family members. Prerequisites: Economics 330, 331, and 332 or concurrent enrollment in 332.6 credits, SS; SI, QRE, Fall-J. Wahl
285. Advanced Topics in Macroeconomics This course focuses on the econometric analysis of macroeconomic and financial time series. Covered topics will include: Stationarity, Granger causality, vector autoregression, co-integration, vector error correction. Examples will primarily focus on the U.S. variables but can be easily extended to other countries. Prerequisites: Economics 330, 331 and 332 or concurrent enrollment in 332.6 credits, SS; SI, QRE, Fall-P. Kapinos
286. Advanced Topics in Long Run Growth and Development This course focuses on economic growth in the very long run. Both historical issues and modern economic growth are considered, as well as the transition between different economic regimes. Topics included: Malthus and long run population dynamics, economic history in the pre-industrial era, transition to modern economic growth, divergence, role of institutions and factors in the development process as well as the influence of trade and globalization. Prerequisites: Economics 330, 331, and 332 or concurrent enrollment in 332.6 credits, SS; SI, QRE, Fall—R. Szulga
287. Integrative Exercise 6 credits, S/NC, ND, Winter, Spring-P. Kapinos, R. Szulga, J. Wahl

## EDUCATIONAL STUDIES (EDUC)

Chair: Professor Deborah Appleman<br>Professor: Deborah Appleman<br>Visiting Assistant Professor: Cathy Tower Oehmke<br>Assistant Professor: Anita Chikkatur<br>Visiting Instructor: Ann Leming<br>Andrew W. Mellon Postdoctoral Fellow: Jack Schneider

Guided by the assumption that an understanding of educational values, policies, and practices is a legitimate and important part of liberal arts studies, Carleton offers a program of courses which, with the exception of student teaching, are open to all students and can be counted toward meeting distribution requirements in social sciences. No major is offered; however, we do offer an interdisciplinary concentration for those students who are especially interested in educational studies but not necessarily in public school teaching.

Students may qualify for 5-12 teaching licensure in the State of Minnesota in communication arts, mathematics, earth and space science, life science, and social studies. 7-12 licensure is offered in chemistry and physics. K-12 licensure is offered in world languages (French, German, Spanish) and
visual arts. Earning licensure requires: completion of an approved Carleton major, other subject area courses not required by the Carleton major and/or specific courses within the major, a specified program of educational studies courses (see the Teacher Education Handbook), and student teaching in the major field, usually in a "13th Term."

Students interested in pursuing teaching licensure should obtain a handbook from the department office and should consult with a member of the education faculty early in their sophomore year. There may be occasional courses offered at St. Olaf through the inter-registration process. Students are encouraged to make formal application for admission to the teacher education program during the spring term of their sophomore year.

Carleton's licensure programs are approved by the Board of Teaching of the Minnesota Department of Education.

## Educational Studies Courses

110. Introduction to Educational Studies This course will focus on education as a multidisciplinary field of study. We will explore the meanings of education within individual lives and institutional contexts, learn to critically examine the assumptions that writers, psychologists, sociologists and philosophers bring to the study of education, and read texts from a variety of disciplines. What has "education" meant in the past? What does "education" mean in contemporary American society? What might "education" mean to people with differing circumstances and perspectives? And what should "education" mean in the future? Open only to first-and second-year students. 6 credits, $S S, W R ; S I, W R 2$, IDS, Fall, Spring-A. Chikkatur, Staff
111. Issues in Urban Education This course will explore the unique qualities that make city schools places of great richness and diversity, as well as places that face financial challenges and declining enrollment. We will explore race, culture, language, and curricular developments in many cities in the United States that have placed urban schools in the forefront of innovative educational leadership. We will read and discuss research on the importance of outreach to communities around a school. Other topics for class reading include the effect of funding inequities on urban schools, political ramifications and their direct effect on children, and the effect of tracking on all students. Prerequisite: one previous educational studies course. 6 credits, SS; SI, IDS, QRE, Fall-A. Chikkatur
112. Educational Psychology Human development and learning theories are studied in relation to the teaching-learning process and the sociocultural contexts of schools. Three hours outside of class per week are devoted to observing learning activities in public school elementary and secondary classrooms and working with students. No prerequisite. 6 credits, SS; SI, Fall-D. Appleman
113. Multicultural Education: Race, Gender and Education This course focuses on the respect for human diversity, especially as these relate to various racial, cultural and economic groups, and to women. It includes lectures and discussions intended to aid students in relating to a wide variety of persons, cultures, and life styles. 6 credits, SS, RAD; SI, IDS, Winter-A. Chikkatur
114. Philosophies of Education What is the nature and purpose of education? In what ways should educational institutions support, challenge, or transform predominant social values? What is ethical educational policy and practice? Such questions are considered in light of a variety of classical and contemporary philosophic perspectives. Students will define a personal philosophy of education and assess its implications for current educational theory and practice, in addition to their own educational development. 6 credits, SS, WR; HI, WR2, Not offered in 2010-2011
115. Developing Education Policy for Access \& Equity This course is designed to engage students in an exploration of the promise of our democracy to educate everyone for the Common Good. It seeks a critical understanding of the so-called achievement gap. Students will look at public schools in the United States and determine how well they are interpreting and executing this mandate to create citizens
both willing and able to sustain and improve the Republic. We will also look at TIMMS, PISA, OECD and other international data to compare our schooling system to systems in other countries. 6 credits, SS ; SI, IDS, QRE, Not offered in 2010-2011
116. The History of American School Reform This course explores major issues in the history of school reform in the United States, with an emphasis on the twentieth century. Readings and discussions examine the role of education in American society, the various and often competing goals of school reformers, and the dynamics of educational change. With particular focus on the American high school, this course looks at why so much reform has produced so little change. 6 credits, SS; SI, Fall-J.

## Schneider

254. Teaching Exceptional Students This course considers the identification, planning, nondiscriminatory testing and instruction of exceptional students. The course includes the topics: the needs and rights of exceptional students, speech/language impaired students, hearing impaired students, visually impaired students, physically impaired students, gifted and talented students, learning disabled students, and emotionally disturbed students. Prerequisite: Educational Studies 234. 3 credits, ND; NE, IDS, Spring-A. Leming
255. Politics of Reading Education The debate over the best way to teach children to read has raged for decades in the United States. This seminar will take the National Reading Panel Report (2000) as the entry point into the world of reading instruction, reading research, and the history of both. It will consider the role of politics in the teaching of reading, in the definition of "research-based," and in the selection of instructional materials. It will also consider the impact that all of this has on teachers and students. 6 credits, SS; SI, QRE, Not offered in 2010-2011
256. Reading, Writing and Teaching for Social Change Literature can motivate us to change. It can widen our world view. This course will involve reading fiction, poetry, and memoirs that present stories and images in such a compelling way that we see the world differently after having read them. Often it is empathy that is the basis for effective action. This empathy can come from a well-written short story as well as an essay. It need not be didactic. We will look at the works of James Welch, Zora Neale Hurston, Martin, Espada, Cheri Register and others as models of literature that creates such empathy and thus motivates students to act. We will be doing creative writing on themes from the literature as well as planning effective ways to use such literature in the classroom. 6 credits, ND; HI, Not offered in 20102011
257. Race, Immigration and Urban Schools This course explores the important role that public schools, particularly in urban areas, have played in the American national imagination as the way to socialize students about what it means to be American and to prepare them to participate as citizens in a democracy. Focusing on two periods of high rates of immigration into the United States. (1890-1920 and 1965-present), the course examines how public schools have attempted to Americanize newly arrived immigrant children as well as to socialize racial minority children into the American mainstream. Prerequisite: 100 or 200-level education course of permission of the instructor. 6 credits, SS, RAD; SI, IDS, Not offered in 2010-2011
258. Teenage Wasteland: Adolescence and the American High School Is adolescence real or invented? How does the American high school affect the nature of American adolescence? How does adolescence affect the characteristics of middle and high schools? In addition to treating the concept historically, this interdisciplinary course focuses on psychological, sociological, and literary views of adolescence in and out of the classroom. We will also analyze how adolescence is represented in popular culture, including television, film, and music. Prerequisite: 100 or 200 level education course. 6 credits, SS; SI, Not offered in 2010-2011
259. Methods of Teaching Art This course explores approaches to teaching art in education including the purposes, standards, materials, and methods for addressing the socio-emotional, creative, and
curricular needs of children and adolescents. 6 credits, ND; NE, Not offered in 2010-2011
260. Methods of Teaching Modern World Languages The course will provide practical, hands-on experience in the teaching of foreign languages and develop the skills to enter the teaching profession. The course will include the study of theoretical perspectives and practical strategies for planning and implementing an effective language program. Students will learn about classroom management, foreign language teaching methods, strategies for teaching reading, writing, speaking and listening in a foreign language, and second language acquisition research. Students will reflect on the role of teaching in their professional development, observe and teach in public school classrooms, and review relevant texts. Prerequisites: Senior standing, Educational Studies 234, and permission of instructor. 6 credits, ND; NE, Not offered in 2010-2011
261. Methods of Teaching Science This course will explore teaching methods for the life and physical sciences in grades 5-12. Curricular materials and active learning labs will be discussed and developed. In addition, time outside of class will be spent observing and teaching in local science classrooms. Will not count toward a biology major. Prerequisites: Permission of instructor. 6 credits, ND; NE, Not offered in 2010-2011
262. Methods of Teaching Social Studies Structure, methodology, strategies, and materials for teaching sociology-anthropology, psychology, economics, political science, geography and history in grades 5-12. Prerequisites: Senior standing and permission of the instructor. 6 credits, $N D ; N E$, Winter-J. Schneider
263. Methods of Teaching Mathematics Crosslisted with MATH 349. Methods of teaching mathematics in grades 7-12. Issues in contemporary mathematics education. Regular visits to school classrooms and teaching a class are required. Prerequisite: Junior or senior standing and permission of the instructor. 6 credits, ND; NE, Spring-D. Haunsperger
264. Schooling and Opportunity in American Society This course is concerned with both the role of schools in society and the impact of society on schools. It deals with race, ethnicity, sex, social class and other factors which influence school achievement, and also examines the widespread assumption that the expansion of schooling can increase equality of opportunity in society. 6 credits, $S S$; SI, IDS, QRE, Winter-A. Chikkatur

355, 356. Student Teaching Fulltime teaching in middle and high school under supervision. Prerequisites: 13th term licensure candidate, special methods in teaching area, and permission of instructor. 6 credits, $S / C R / N C, N D ;$, NE, Fall—D. Appleman
360. Gender, Sexuality and Schooling This course explores how gender and sexuality are socially constructed in school settings. Using a variety of feminist cultural texts ranging from empirical studies to popular films, we will focus on how masculinities, femininities and queer identities are formed and performed in the context of school, and how notions of gender and sexuality inform interactions between teachers, students and administrators. In addition, we will address how race, class, age and nation complicate gender and sexuality identities. Specific topics to be covered include sex education, teachers' work, sex/gender segregation, and the experiences of students. 6 credits, SS, RAD; SI, IDS, Not offered in 2010-2011
365. Democracy, Diversity, and Education A junior-level seminar, the course will examine various theories about the relationship between democracy and education and the role of American public schools in creating a citizenry for a democratic society. The first half of the course will explore theorists who have written about the relationship between education and democracy and the second half will explore a case study (which will vary from year to year) to examine how this relationship actually unfolds in our educational system. Prerequisite: A 100 or 200 level educational studies course, or permission of instructor. 6 credits, SS; SI, Offered in alternate years, Spring-A. Chikkatur
379. Methods of Literacy Instruction Crosslisted with ENGL 379. This course introduces students to a variety of approaches and perspective in teaching English language arts in grades 5-12. We will explore methodologies and issues surrounding the teaching of reading, literature, language and composition in middle and high schools. In addition to the usual course components of reading, writing, and discussion approximately one day per week outside of class time will be devoted to observation and mini-teaching in 5-12 grade English classes in the Twin Cities. Prerequisites: Senior English major, permission of the instructor and Educational Studies 234. 6 credits, ND; NE, Winter-D. Appleman
380. Ethics and Education This course will explore the ethical issues that face educators, parents, and volunteers as they attempt to guard the physical safety and nurture the educational well being of kids in schools. The course will introduce students to a range of ethical theories. It will be organized around a set of specific topics including: indoctrination and other forms of manipulation, systems of reward and punishment, verbal abuse and bullying, confidentiality and other problems of privacy, emotionallycharged curricula and teaching strategies, enforcement of school rules, and responsibility for school safety. The course will use case method to engage the issues and spur discussion. 6 credits, SS, HI, Not offered in 2010-2011
385. Schooling and Communities: A Practicum for Teacher Candidates This course provides licensure candidates with an opportunity to work directly in schools and community organizations related to schools and to reflect on that experience in a classroom setting. Prerequisites: Acceptance into teacher education program and registration for fall student teaching. 3 credits, ND; NE, Spring-C.
Oehmke
386. Teaching Reading in the Content Areas This course is required for all students pursuing teacher licensure, regardless of content area. The course provides a theoretical and practical foundation for helping secondary teachers learn to provide specific instructional support for secondary readers. The course will cover instruction in phonemic awareness, phonics, fluency, vocabulary, and text comprehension. Theoretical instruction will be combined with a clinical tutoring experience. Prerequisite: Educational Studies 234 and acceptance in Teacher Licensure Program or permission of the instructor. 3 credits, ND; NE, Spring-C. Oehmke
395. Senior Seminar This is a research and design seminar for educational studies concentrators. It focuses on a contemporary issue in American education. Recent seminars have been on educational reform and reformers, service learning, literacy leaders in education, education and the emotions, and personal essays about education. Some off campus work with public school students and teachers is an integral part of the seminar. Prerequisite: Educational Studies concentrator or permission of the instructor. 6 credits, SS; NE, Spring-D. Appleman

## EDUCATIONAL STUDIES CONCENTRATION

## Director: Professor Deborah Appleman

The Educational Studies Concentration provides an interdisciplinary approach to the study of education as an individual pursuit, an institutional venture, and a societal problem. The concentration aims to develop thoughtful, skillful and imaginative students of the psychology, cultural history, and politics of education. Students will pursue the study of education as both a disabusing and an enabling liberal art, one which reveals the constraints of socialization and informs alternative visions of self and community. The concentration is appropriate for students of all majors interested in the stewardship of teaching and learning.

## Requirements for the Concentration

All students will be required to take a minimum of seven courses: three core courses, three
supporting courses and a senior seminar.
Core Courses:
EDUC 110 Introduction to Educational Studies
EDUC 234 Educational Psychology
and one of the following three:
EDUC 225 Issues in Urban Education (Not offered in 2010-2011)
EDUC 240 Philosophies of Education (Not offered in 2010-2011)
EDUC 353 Schooling and Opportunity in American Society
Supporting Courses: Select one course from each of the three clusters; these courses must be from three different departments. The courses listed below are suggestions. We can neither control nor predict when courses from other departments are offered. If you have difficulty enrolling in a course for a particular cluster, please see the concentration coordinator to discuss other courses that might fulfill the requirement.

Cluster I (Learning, Cognition and Development)
EDUC 344 Teenage Wasteland: Adolescence and the American High School (Not offered in 2010-2011)

PSYC 210 Psychology of Learning
CGSC 236 Thinking, Reasoning, and Decision-Making (Not offered in 2010-2011)
PSYC 250 Developmental Psychology (Not offered in 2010-2011)
CGSC 380 Seminar in Developmental Psychology: Cognitive Development During the
Preschool Years (Not offered in 2010-2011)
CGSC 385 Cognitive Development in Middle Childhood (Not offered in 2010-2011)
CGSC 386 Adolescent Cognitive Development: Developing an Identity and Life Plans
Cluster II (Schooling in a Diverse Society)
EDUC 238 Multicultural Education
EDUC 360 Gender, Sexuality, and Schooling ((Not offered in 2010-2011)
EDUC 365 Democracy, Diversity and Education
HIST 220 African American History I
HIST 221 African American History II ((Not offered in 2010-2011)
PSYC 384 Psychology of Prejudice
RELG 140 Religion and American Culture (Not offered in 2010-2011)
Cluster III (Education and Inequality)
EDUC 225 Issues in Urban Education (Not offered in 2010-2011)
EDUC 340 Race, Immigration and Urban Schools
EDUC 353 Schooling and Opportunity in American Society
POSC 306 How Race Matters in American Politics (Not offered in 2010-2011)
POSC 308 Poverty and Public Policy (Not offered in 2010-2011)
SOAN 220 Class, Power and Inequality in America (Not offered in 2010-2011)
Senior Seminar: EDUC 395 Senior Seminar

## ENGLISH (ENGL)

Chair: Professor Kofi Owusu
Professors: Nancy J. Cho, Susan Jaret McKinstry, Michael J. Kowalewski, Elizabeth McKinsey, Kofi Owusu, Timothy J. Raylor, Gregory Blake Smith, Constance H. Walker

Associate Professors: Peter Balaam, Adriana Estill, Gregory G. Hewett, George G. Shuffelton Assistant Professors: Arnab Chakladar, Pierre Hecker, Jessica L. Leiman
Senior Lecturers: Elizabeth Ciner, Carol A. Rutz
Visiting Instructor: Dennis Cass

## General Information

Courses numbered from 100 to 294 (introductory courses) are designed for non-majors and majors alike. With the exception of 200-level creative writing courses these courses have no prerequisites. English 295, "Critical Methods," requires prior completion of one Foundations course and another 6-credit English course. (English 295 is not open to first-year students.) Literature courses numbered 300 and above (upper-level courses) require prior completion of one Foundations course and another 6-credit English course. Intermediate courses in creative writing ( $200-\mathrm{level}$ ) require prior completion of one 6-credit English course; admission to upper-level courses in creative writing (300level) is by portfolio submission. English 395, "Advanced Seminar," requires prior completion of English 295 and one 300-level course.

## Requirements for a Major

Seventy-two credits in English, including the following:

1. Foundations: One designated 100-level course that develops skills of literary analysis and introduces the concept of genre
2. Historical Eras: 36 credits in literature courses numbered 200-395 (excluding 220 and 295)
which must include:
a. Group I: 12 credits in literature before 1660
b. Group II: 12 credits in literature between 1660 and 1900
c. Group III: 12 credits in literature after 1900
3. English 295: Critical Methods
4. English 395: Advanced Seminar
5. English 400: Senior Integrative Exercise (A senior may choose one of the following):
a. Colloquium Option: A group option in which participants discuss, analyze and write about a thematically coherent list of literary works.
b. Research Essay Option: An extended essay on a topic of the student's own devising. Open only to students who have completed their Advanced Seminar by the end of fall term senior year.
c. Creative Writing Option: Creation of a work of literary art. Open only to students who have completed at least two creative writing courses (one of which must be at the 300 level) by the end of fall term senior year.
d. Project Option: Creation of an individual or group multidisciplinary project. Of the 72 credits required to complete the major:
6. at least 6 credits must be taken in each of the following traditions:
a. British literature
b. U.S. literature
c. English literatures other than British and U.S.
7. at least 24 credits must be in courses numbered 300-395
8. up to 6 credits may be in literature other than English in the original or translation
9. up to 12 credits may be in creative writing

Double-majors considering completing the integrative exercise during the junior year will need written approval from the departmental chair.

## Workshops in Writing

The Department of English offers workshop courses in the writing of fiction, poetry, and creative non-fiction for those students who wish to gain experience in writing. Students are encouraged to submit their work to college publications such as The Lens, manuscript, the Clap, and Carleton Progressive.

Writers on the Carleton faculty include poets Gregory Hewett and Susan Jaret McKinstry and novelist Gregory Blake Smith. In addition to those courses offered by regular faculty members, the department brings visiting writers to campus to read and to conduct workshops in their specialties.

Visitors in recent years have included playwright Tony Kushner, memoirists Richard Rodriquez and Patricia Hampl, poets Robert Creeley, Carolyn Forche, Sharon Olds, and Andrew Hudgins, nature writers Dan O'Brien and David Rains Wallace, and fiction-writers Jane Hamilton, Ann Beattie, Maxine Hong Kingston, and Marilynne Robinson.

## English Courses

99. Summer Writing Program Emphasizing a writing process approach, the Summer Writing Program helps high school seniors learn to compose academic papers that are similar to those they will write in college. Students read both contemporary and traditional literature from classic texts by writers such as Plato and Shakespeare to a variety of modern short stories, essays, and poems by authors such as August Wilson, Margaret Atwood, James Baldwin, Alice Walker, and Adrienne Rich. This literature then becomes the focus of their papers. Students write every day, and although occasional creative writing exercises are included, the main emphasis of the course will be on expository prose. 6 credits, S/CR/NC, ND; NE, Summer-Staff
100. Visions Of the Waste Land In his great post-World War I poem, T. S. Eliot described the waste land of western civilization as "a heap of broken images." We will explore how the writers of the first half of the twentieth-century invented ways of reshaping those broken images into a new literary art that has come to be called Modernism. Writers studied will likely include Yeats, Joyce, Woolf, and Faulkner. Attention will be given to the writing of literary critical papers, and to supplying students with the foundational tools for more advanced literary study. 6 credits, AI, WR1, Offered in alternate years, Fall-G. Smith
101. Novel, Nation, Self With an emphasis on critical reading and writing in an academic context, this course will examine how contemporary writers from a range of global locations approach the question of the writing of the self and of the nation. Reading novels from both familiar and unfamiliar cultural contexts we will examine closely our practices of reading, and the cultural expectations and assumptions that underlie them. 6 credits, AI, WR1, Fall-A. Chakladar
102. The Questing Hero This class explores the enduring genre of romance. Chivalric romance has given us the familiar image of the wandering knight in search of adventure, but has also generated the modern novel and many forms of popular cinema, including westerns and sports films. As we read examples of romance from the Middle Ages up to the present, we will consider what has made this genre so durable, flexible, and popular. And we will consider how the narrative model of the questing knight continues to influence contemporary stories of trial, maturation, and success. 6 credits, AI, WRI, Fall-G. Shuffelton
103. Writing for Success in College: Reflection, Exploration, Rhetoric Writing makes thinking visible. In this course, students will conduct research projects that involve posing a problem, collecting data (in many forms), choosing what data are relevant, and making a case for action. Readings will range from the Western rhetorical tradition to current events. All students will participate in peer review and oral presentations. 6 credits, AI, WR1, QRE, Fall-C. Rutz
104. Shakespeare on Film This seminar explores the many ways in which Shakespeare's plays have been adapted for film. From Hollywood to Bollywood to Japan, and from Westerns to Sci-fi to cartoons, Shakespeare has been reworked and reconceived in every filmmaking culture and in every genre. A number of major plays are considered through both "straightforward" adaptations and unconventional appropriations. Using the tools of both literary criticism and film analysis, the course seeks to assess the interpretive value of these films for Shakespeare, their place in performance history and film history, as well as their status as individual works of art. 6 credits, AI, WR1, Fall-P. Hecker
105. American Gothic The Gothic mode in literature is not only a matter of miasmic tarns and haunted
castles with trapdoors in them; more importantly, it expresses those things within a culture that are somehow simultaneously both unthinkable and undeniable. If the gothic prompts some part of us to shriek "No!" in horror--it works because another part of us sees and knows the horror and says "yes." So what was haunting America in the nineteenth century? To a nation founded on "self-evident" truths, its gothic fictions spoke the unspeakable about self, race, gender, power. Works by Brockden Brown, Irving, Poe, Hawthorne, Melville, Stowe, Gilman, Perkins, Chesnutt. 6 credits, AI, WR1, Fall-P .

## Balaam

100. Writing About America and Globalization Focusing on rhetorical choices and writing strategies, we will seek to read critically, formulate questions, and write persuasively about contemporary issues of globalization. Varied readings, journalistic, scholarly, and literary, as well as our own experiences, will provide a springboard for discussion of the impact of globalization on particular cultures (in the United States and other countries), economic justice, national sovereignty, sustainability, and human rights in the face of increasing economic interdependence and instant communication in our "globalized" world. Students will refine persuasive skills through research, writing and revising several major essays, peer review, and a final oral presentation. 6 credits, AI, WR1, IS, Fall-E. McKinsey
101. Imagining a Self This course examines how first-person narrators present, define, defend, and construct the self. We will read an assortment of autobiographical and fictional works, focusing on the critical issues that the first-person speaker "I" raises. In particular, we will consider the risks and rewards of narrative self-exposure, the relationship between autobiography and the novel, and the apparent intimacy between first-person narrators and their readers. Authors will include James Boswell, Charlotte Bronte, Harriet Jacobs, Sylvia Plath, and Dave Eggers. 6 credits, AI, WR1, Fall—J. Leiman
102. Introduction to Rhetoric English 109 is the single Carleton course devoted exclusively to the study and practice of expository prose. It is designed to provide students with the organizational and argumentative skills they will need in order to write effectively at the college level and beyond. All sections of the course feature diverse readings, weekly writing exercises and essays, and individual tutorials. 6 credits, ND, WR; NE, WR2, Winter, Spring—T. Raylor, P. Balaam
103. American Voices This course provides a foundation for further study in poetry and the American tradition. We will examine the work of four pairs of American poets and explore the ways in which they helped define a national literature. Beginning with the startling Puritan verse of Anne Bradstreet and Edward Taylor, we move to the iconoclastic Romantic-Transcendentalist poetry of Walt Whitman and Emily Dickinson, followed by the Modernist experiments of T.S. Eliot and H.D., and finally the Beat poetry of Allen Ginsberg and Confessional poetry of Sylvia Plath. Works include: Song of Myself, The Waste Land, Howl and Daddy. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
104. Introduction to Medieval Narrative This class will focus on three of the most popular and closely connected modes of narrative enjoyed by medieval audiences: the epic, the romance, and the saint's life. Readings, drawn primarily from the English and French traditions, will include Beowulf, The Song of Roland, the Arthurian romances of Chretien de Troyes, and legends of St. Alexis and St. Margaret. We will consider how each narrative mode influenced the other, as we encounter warriors and lovers who suffer like saints, and saints who triumph like warriors and lovers. Readings will be in translation or highly accessible modernizations. 6 credits, AL; LA, Not offered in 2010-2011
105. The Art of Storytelling Jorge Luis Borges is quoted as saying that "unlike the novel, a short story may be, for all purposes, essential." This course focuses attention primarily on the short story as an enduring form. We will read a selection of short stories drawn from different literary periods and from various parts of the world. Stories to be read include those by Poe, Gilman, Chekhov, Joyce, Borges, John Cheever, Alice Munro, Toni Bambara, Grace Paley, Margaret Atwood, Lorrie Moore, Edwidge Danticat, Salman Rushdie, and Sherman Alexie. 6 credits, AL, WR; LA, WR2, Spring-K. Owusu
106. Introduction to English Drama This class introduces the varied forms of English drama over the
last six hundred years. We will move chronologically, from the religious street theater of the medieval city and the rapid development of professional theater in Renaissance England, all the way up to the work of twentieth-century playwrights. We will consider changes to the staging and audiences of drama, and ask ourselves what sorts of cultural work drama can perform. 6 credits, $A L, W R$; LA, WR2, Offered in alternate years, Spring-G. Shuffelton
107. African American Literature This course pays particular attention to the tradition of African American literary expression and the individual talent that brings depth and diversity to that tradition. The course's broader aims will be complemented by an introduction to the concept of genre and by the cultivation of the relevant skills of literary analysis. Authors to be read include Baraka, Ed Bullins, Countee Cullen, Douglass, Ellison, Nikki Giovanni, Hughes, Weldon Johnson, Larsen, and Wheatley. 6 credits, $A L$, WR; LA, WR2, IDS, Winter-K. Owusu
108. Introduction to Poetry We will look at the whole kingdom of poetry, exploring how poets use form, tone, sound, imagery, rhythm, and subject matter to create what Wallace Stevens called the "supreme fiction." Examples will be drawn from around the world, from Sappho to spoken word. Participation in discussion is mandatory; essay assignments will ask you to provide close readings of particular works; a couple of assignments will focus on the writing of poems so as to give you a full understanding of this ancient and living art. 6 credits, $A L$, WR; LA, WR2, Fall-A. Estill
109. Introduction to U.S. Latino/a Literature We will begin by examining the forefathers and mothers of Latino/a literature: the nineteenth century texts of exile, struggles for Latin American independence, and southwestern resistance and accommodation. The early twentieth century offers new genres: immigrant novels and popular poetry that reveal the nascent Latino identities rooted in (or formed in opposition to) U.S. ethics and ideals. Finally we will read a sampling of the many excellent contemporary authors who are transforming the face of American literature. 6 credits, $A L, W R, R A D$; LA, WR2, IDS, Not offered in 2010-2011
110. Introduction to Literarary Modernism "On or about December 1910 human character changed," Virginia Woolf once observed, and indeed, something did happen at the beginning of the twentieth century that changed the course of literature forever. We will look at the great poets and novelists of modernism--Yeats, Joyce, Eliot, Faulkner among many others--and try to come to terms with the literary movement that helped shape the consciousness of the twentieth century. 6 credits, $A L, W R ; L A, W R 2$, Not offered in 2010-2011
111. Introduction to Narrative How do we tell stories, and why? What are the different elements of narrative (words, images, even sounds), and how do they work across disciplines and forms, both fictional and non-fictional? This course will study the form and function--and the power and persuasion--of narrative, examining examples of fiction, non-fiction, graphic novels, illustrated books, poetry, television, and cinema. 6 credits, $A L, W R$; LA, WR2, Winter-S. Jaret McKinstry
112. Introduction to British Comedy "And those things do best please me / That befall prepost'rously." A survey of comic plays, novels, short stories, films and television from Shakespeare, Austen, Lewis Carroll, Gilbert and Sullivan, Oscar Wilde, through P.G. Wodehouse and beyond. 6 credits, AL, WR; LA, WR2, Offered in alternate years, Fall-C. Walker
113. Introduction to Children's Literature A literary investigation of the genre, with attention to its roots, aesthetic intricacies. and social and psychological functions. Topics will include the genre's origins in the power struggles and wish fulfillment of oral tradition stories, the rise of the Enlightenment "fairytale," the Romantic invention of childhood, the nineteenth and twentieth-century emergence of works written and published for a child audience. Readings from the Grimms, Straparola, Basile, Perrault, d’Aulnoy, Bettelheim, Wordsworth, Burnett, Kipling, Jarrell, E. B. White, and Sendak. 6 credits, AL, WR; LA, WR2, Offered in alternate years, Spring-P. Balaam
114. Imperial Adventures Indiana Jones has a pedigree. In this class we will encounter some of his ancestors in stories, novels and comic books from the early decades of the twentieth century. The wilds of Afghanistan, the African forest, a prehistoric world in Patagonia, the opium dens of mysterious exotic London--these will be but some of our stops as we examine the structure and ideology and lasting legacy of the imperial adventure tale. Authors we will read include Arthur Conan Doyle, Edgar Rice Burroughs, Rudyard Kipling and H. Rider Haggard. 6 credits, AL, WR; LA, WR2, IS, Winter-A. Chakladar
115. Introduction to Creative Writing This course offers training in the writing and revision of poetry and prose fiction, supplemented by examples from published writers and some essays on the creative process. Discussion of each participant's writing is the central mode of instruction. 6 credits, $A L, W R$; ARP, WR2, Fall, Winter, Spring-S. Jaret McKinstry, G. Hewett, G. Smith
116. Chaucer I: The Canterbury Tales A study of The Canterbury Tales in Middle English (no previous knowledge assumed), concentrating on the pilgrims as narrating subjects, and on Chaucer's legendary status as the "Father" of English literature. 6 credits, AL, WR; LA, WR2, Fall-G. Shuffelton
117. Medieval and Renaissance English Literature An introduction to some of the major genres, texts, and authors of medieval and Renaissance England. Readings may include works of Chaucer, Spenser, Shakespeare, Milton, and the lyric poets of the sixteenth and seventeenth centuries. 6 credits, AL, WR; LA, WR2, Winter-P. Hecker
118. Neoclassic, Romantic, and Victorian Literature Readings in eighteenth and nineteenth-century British literature. 6 credits, AL, WR; LA, WR2, Winter, Spring-J. Leiman, C. Walker
119. Nineteenth-Century American Literature A survey of the major forms and voices of nineteenthcentury American literature during the Romantic and Realist periods, with attention to the historical and intellectual contexts of that work. Topics covered will include the literary writings of
Transcendentalism, abolition, and the rise of literary "realism" after the Civil War as an artistic response to urbanization and industrialism. Writers to be read include Irving, Hawthorne, Melville, Emerson, Douglass, Dickinson, Whitman, Twain, James, and Wharton. 6 credits, $A L$, WR; LA, WR2, Winter-M. Kowalewski
120. Christopher Marlowe Christopher Marlowe lived fast, died young, and left behind a beautiful body of work. The course will explore the major plays and poems, as well as the life, of this transgressive Elizabethan writer. 3 credits, AL; LA, WR2, Winter-P. Hecker
121. Revenge Tragedy Madness, murder, conspiracy, poison, incest, rape, ghosts, and lots of blood: the fashion for revenge tragedy in Elizabethan and Jacobean England led to the creation of some of the most brilliant, violent, funny, and deeply strange plays in the history of the language. Authors may include Cary, Chapman, Ford, Marston, Middleton, Kyd, Tourneur, and Webster. 3 credits, AL; LA, WR2, Winter-P. Hecker
122. Modern American Literature A survey of some of the central movements and texts in American literature, from World War I to the present. Topics covered will include modernism, the Harlem Renaissance, the Beat generation and postmodernism. 6 credits, $A L$, WR; LA, WR2, Fall-M. Kowalewski
123. The Gothic Spirit The eighteenth and early nineteenth century saw the rise of the Gothic, a genre populated by brooding hero-villains, vulnerable virgins, mad monks, ghosts, and monsters. In this course, we will examine the conventions and concerns of the Gothic, addressing its preoccupation with terror, sex, and the supernatural. As we situate this genre within its literary and historical context, we will consider its relationship to realism and Romanticism, and we will explore how it reflects the political and cultural anxieties of the age. Authors include Walpole, Radcliffe, Lewis, Austen, M. Shelley, and E. Bronte. 6 credits, $A L$, WR; LA, WR2, Spring-J. Leiman
124. Arts of Oral Presentation Instruction and practice in being a speaker and an audience in formal and informal settings. 3 credits, S/CR/NC, ND; NE, Winter, Spring-M. Kowalewski, G. Shuffelton
125. The Art of Jane Austen All of Jane Austen's fiction will be read; the works she did not complete or choose to publish during her lifetime will be studied in an attempt to understand the art of her mature comic masterpieces, Sense and Sensibility, Pride and Prejudice, Mansfield Park, Emma, and Persuasion. 6 credits, AL, WR; LA, WR2, Fall—S. Jaret McKinstry
126. Borderlands: Places and People The borderlands provide a powerful metaphoric vehicle for American cultural expression. We will engage this metaphor through a broad chronological and generic range of literary and visual texts. Gloria Anzaldúa's Borderlands and John Sayles's Lone Star will initiate our discussion through their reflections on the United States-Mexico border and its production of border identities. Modernism provides us entry into early twentieth century concerns around mulatto bodies and community construction. Subsequent texts allow us to trace the development of fears and utopian imaginings around a variety of hybrid identities through the twentieth and into twenty-first century science fiction. 6 credits, $A L, W R, R A D$; HI, WR2, IDS, Not offered in 2010-2011
127. Literature of the American South Masterpieces of the "Southern Renaissance" of the early and mid-twentieth century, in the context of American regionalism and particularly the culture of the South, the legacy of slavery and race relations, social and gender roles, and the modernist movement in literature. Authors will include Allen Tate, Jean Toomer, William Faulkner, Robert Penn Warren, Zora Neale Hurston, Eudora Welty, Katherine Anne Porter, William Percy, and others. 6 credits, $A L, W R$, RAD; LA, WR2, IDS, Offered in alternate years, Winter-E. McKinsey
128. Asian American Literature This course is an introduction to major works and authors of fiction, drama, and poetry from about 1900 to the present. We will trace the development of Asian American literary traditions while exploring the rich diversity of recent voices in the field. Authors to be read include Carlos Bulosan, Sui Sin Far, Philip Kan Gotanda, Maxine Hong Kingston, Jhumpa Lahiri, Milton Murayama, Chang-rae Lee, Li-young Lee, and John Okada. 6 credits, $A L$, WR, RAD; LA, WR2, IDS, Not offered in 2010-2011
129. American Nature Writing A study of the environmental imagination in American literature. We will explore the relationship between literature and the natural sciences and examine questions of style, narrative, and representation in the light of larger social, ethical, and political concerns about the environment. Authors read will include Thoreau, Muir, Jeffers, Abbey, and Leopold. Students will write a creative Natural History essay as part of the course requirements. 6 credits, $A L, W R ; L A, W R 2$, Not offered in 2010-2011
130. African Literature in English This is a course on texts drawn from English-speaking Africa since the 1950's. Authors to be read include Chinua Achebe, Ama Ata Aidoo, Ayi Kwei Armah, Buchi Emecheta, Bessie Head, Benjamin Kwakye, and Wole Soyinka. 6 credits, AL, RAD; LA, IS, Spring—K. Owusu
131. American Best-Sellers A book's popularity is itself a kind of criticism, complex evidence that the best-seller in question expressed the hopes and fears of people who found them nowhere else so forcibly put. In this course--a literary, historical, and cultural exploration of best-selling nineteenth century American fiction--we will seek to understand not only which books became popular, but why they did, how their formal qualities and particular engagements moved contemporary readers to buy and read them so avidly. Page-turners, barn-burners, and tear-jerkers, nine of them, by Rowson, Cooper, Stowe, Alger, Burroughs, Zane Grey, Wharton. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
132. The Romantic World Heroes and demons, revolutionaries and explorers, the Sublime and the Abyss, and of course Nature, will be among the subjects of this interdisciplinary, multi-genre course on the international cultural, intellectual, and political movement that became known as Romanticism, a
movement whose reverberations continue to be felt strongly today. Among the works and authors to be studied: Frankenstein and The Last of the Mohicans; Wordsworth and Whitman; The Sorrows of Young Werther and Confessions of an English Opium Eater; Poe and Coleridge; the Brothers Grimm and Hawthorne; Beethoven and Chopin; the Hudson River School and Turner; Goya and Verdi; Rousseau and Thoreau. 6 credits, AL, WR; LA, WR2, IS, Offered in alternate years, Fall-G. Hewett
133. Text and Film Each text selected for this course will be paired with its filmic adaptation for a series of discussions focused on narrative structures, points of view, frames of reference, and textual (in)fidelity. We will read the following texts and watch their film versions: Wright's Native Son, Malcolm X and Haley's The Autobiography of Malcolm X, Naylor's The Women of Brewster Place, Walker's The Color Purple, McMillan's Waiting to Exhale, and Mosley's Devil in a Blue Dress. 6 credits, AL; LA, IDS, Not offered in 2010-2011
134. Shakespeare I A chronological survey of the whole of Shakespeare's career, covering all genres and periods, this course explores the nature of Shakespeare's genius and the scope of his art. Particular attention is paid to the relationship between literature and stagecraft ("page to stage"). By tackling the complexities of prosody, of textual transmission, and of Shakespeare's highly figurative and metaphorical language, the course will help you further develop your abilities to think critically about literature. 6 credits, AL; LA, Fall-P. Hecker
135. Bollywood Nation This course will serve as an introduction to Bollywood or popular Hindi cinema from India. We will trace the history of this cinema and analyze its formal components. We will watch and discuss some of the most celebrated and popular films of the last sixty years with particular emphasis on urban thrillers and social dramas. 6 credits, $A L, W R, R A D ; L A, W R 2, I S$, Offered in alternate years, Winter-A. Chakladar
136. The American West Wallace Stegner once described the West as "the geography of hope" in the American imagination. Despite various dystopian urban pressures, the region still conjures up images of wide vistas and sunburned optimism. We will explore this paradox by examining both popular mythic conceptions of the West (primarily in film) and more searching literary treatments of the same terrain. We will explore how writers such as Twain, Cather, Stegner and Cormac McCarthy have dealt with the geographical diversity and multi-ethnic history of the West. Weekly film showings will include The Searchers, McCabe and Mrs. Miller, Unforgiven, and Lone Star. 6 credits, AL, WR; LA, WR2, Offered in alternate years, Fall-M. Kowalewski
137. Visions of California An interdisciplinary exploration of the ways in which California has been imagined in literature, art, film and popular culture from pre-contact to the present. We will explore the state both as a place (or rather, a mosaic of places) and as a continuing metaphor--whether of promise or disintegration--for the rest of the country. Authors read will include Muir, Steinbeck, Chandler, West, and Didion. Weekly film showings will include Sunset Boulevard, Chinatown and Bladerunner. 6 credits, AL, WR; LA, WR2, IDS, Offered in alternate years, Spring—M. Kowalewski
138. Modern Indian Fiction In this course we will follow the various paths that the novel in India has taken since the early twentieth century. Reading both works composed in English and some in translation we will probe in particular the ways in which questions of language and national/cultural identity are constructed and critiqued in the Indian novel. We will read some of the most celebrated Indian writers of the last 100 years as well as some who are not as well-known as they should be. The course will also introduce you to some fundamental concepts in postcolonial studies. 6 credits, $A L, W R$, RAD; LA, WR2, IS, Not offered in 2010-2011
139. Contemporary Indian Fiction Contemporary Indian writers, based either in India or abroad, have become significant figures in the global literary landscape. This can be traced to the publication of Salman Rushdie's second novel, Midnight's Children in 1981. We will begin with that novel and read some of the other notable works of fiction of the following decades. The class will provide both a
thorough grounding in the contemporary Indian literary scene as well as an introduction to some concepts in post-colonial studies. 6 credits, $A L, W R, R A D ; L A, W R 2, I S$, Offered in alternate years, Spring-A. Chakladar
140. Caribbean Fiction This course will examine Anglophone fiction in the Caribbean from the late colonial period through our contemporary moment. We will examine major developments in form and language as well as the writing of identity, personal and (trans)national. We will read works by canonical writers such as V.S Naipaul, George Lamming and Jamaica Kincaid, as well as by lesser known contemporary writers. 6 credits, AL, WR, RAD; LA, WR2, IS, Not offered in 2010-2011
141. Contemporary American Playwrights of Color This course examines a diverse selection of plays from the 1960s to the present, exploring how different theatrical contexts, from Broadway to regional theater to Off-Off Broadway, frame the staging of ethnic identity. Playwrights and performers to be studied include Amiri Baraka, Alice Childress, Ntozake Shange, George C. Wolfe, Luis Valdez, David Henry Hwang, August Wilson, Philip Gotanda, Maria Irene Fornes, Suzan-Lori Parks, and Anna Deavere Smith. There will be occasional out-of-class film screenings, and attendance at live theater performances when possible. 6 credits, $A L$, WR, RAD; LA, WR2, IDS, Fall-N. Cho
142. Short Story Workshop An introduction to the writing of the short story (prior familiarity with the genre of the short story is expected of class members). Each student will write and have discussed in class three stories (from 1,500 to 6,000 words in length) and give constructive suggestions, including written critiques, for revising the stories written by other members of the class. Attention will be paid to all the elements of fiction: characterization, point of view, conflict, setting, dialogue, etc. Prerequisite: One prior 6-credit English course. 6 credits, $S / C R / N C, A L, W R ; A R P$, WR2, Fall, Winter-G. Smith
143. Poetry Workshop This course offers newer poets ways of developing poetic craft and vision. Through intensive writing and revision of poetry, supplemented by reading and discussion of poetry, each member of the group will create a portfolio of poems. Prerequisite: Prior completion of one 6credit English course. 6 credits, AL, WR; ARP, WR2, Not offered in 2010-2011
144. Truth vs. Power: A Journey in Journalism Journalism is in turmoil today. Bold experimentation is needed to meet such dramatic new challenges to journalism as the Internet, the decline of newspapers, multilingual readerships, and global crises requiring activism more than "objectivity." The class will move between a theoretical focus--exploring journalism's basic theories and often-contradictory methods, purposes and aims-- and a practical focus inviting students to strive towards their highest journalistic ideals. Students will be challenged to blend journalism's indispensable norms of factual accuracy, fairness and quality writing with new technologies such as blogging, podcasting, videocasting, social networking and RSS feeds. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
145. Creative Non-Fiction Workshop Do you like it when true things happen? Would you like to take those true things and make them sound truer than true? Would you like to use words while doing that? In this course, students will write a rant/appreciation, a reported essay, and a personal essay. Class time will be spent on live writing assignments, giving and receiving feedback, learning basic research techniques, and having discussions about things that seem trivial right up until the moment that their ultimate significance is revealed. Prerequisite: One prior 6-credit course in English. 6 credits, $S / C R / N C$, AL, WR; ARP, WR2, Spring—D. Cass
146. English Theater and Literature Seminar in London: Regency London The British Regency (1811-1820) was an era of extraordinary political, intellectual, and social volatility and vitality. With London as our classroom, we will explore the history of the Regency by means of its magnificent public and domestic architecture, its fashion and décor, its fine arts, and its literature, including the poetry of Byron, Shelley, and Keats, the essays of Hazlitt and Lamb, and the novels of Austen. Field trips will include visits to the Tate Britain, the Victoria and Albert Museum, the British Library, Sir John Soane's Museum, Dennis Severs' House, and the Royal Botanic Garden at Kew. 6 credits, AL; LA, Winter-C.

## Walker

282. English Theater and Literature Seminar in London: London Theater The group will attend productions of classical and contemporary plays in London and Stratford-on-Avon (about two per week) and do related reading. Class discussions will focus on dramatic genres and themes, production and direction decisions, acting styles, and design. Guest speakers will include actors, critics, and directors. Students will keep a theater journal and develop several entries into full reviews of plays. 6 credits, $A L$; LA, Winter-C. Walker
283. The Arts of Power: Poetry, Painting, and Propaganda at the English Court (1509-1685) This seminar--team-taught by members of the Art History and English Departments--will examine the visual and literary arts at the Tudor and Stuart courts in England. Topics will include Henry VIII and the northern Renaissance; the cult of Elizabeth I; patronage and diplomacy (Rubens), portraiture (Van Dyck), and multimedia entertainments (the masques of Inigo Jones and Ben Jonson) under James I and Charles I. Questions raised will include the extent to which the arts of propaganda can question or critique power, and the extent to which the visual and verbal arts were conceived as rivals or allies. 6 credits, $A L$, WR; LA, WR2, Spring-T. Raylor, A. Kettering
284. English Theater and Literature Seminar in London: Directed Reading Students will read selected books and essays on English history and culture to provide background for the program; a list of required works will be provided in the fall of 2010 to students accepted to the program. Readings must be completed by the beginning of the winter term program in London, when a "take-home" exam essay on them will be due. 4 credits, $S / C R / N C$, $N D$; NE, Winter-C. Walker
285. Critical Methods Required of students majoring in English, this course explores practical and theoretical issues in literary analysis and contemporary criticism. Not open to first year students. Prerequisite: Prior completion of one Foundations course and another 6-credit English course. 6 credits, AL, WR; LA, WR2, Winter, Spring-A. Estill, S. Jaret McKinstry
286. The Courtly Chaucer None of the 493 documents in the Chaucer Life Records mention his poetry; most describe his activities as a courtier and royal administrator. This course seeks to reconcile this courtly Chaucer with his writing prior to the Canterbury Tales. As we read his early dream visions, we will immerse ourselves in the courtly cultures Chaucer learned by reading French and Italian works in translation, and by examining the art and manners of the English court. The final weeks will be spent reading his finished masterpiece, Troilus and Criseyde, sometimes called "the first novel in English." 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
287. Renaissance Selves What is a "self?" And where do our ideas of it come from? Some scholars have argued that modern notions of individuality, subjectivity, interiority, and of performative "selffashioning" emerged during the Renaissance; others respond that this is not history, but myth. We'll join the debate by reading the major scholarly contributions (including work by Burkhardt and Greenblatt); by studying (in translation) the texts around which the argument revolves-Castiglione's Courtier, Machiavelli's Prince, Montaigne's Essays; and by examining exemplars of the literary genres most directly associated with the expression of selfhood: autobiography (Anne Clifford), essay (Bacon), and lyric poem (Sidney, Shakespeare). Prerequisite: one course numbered 110-175 or written permission of the instructor. 6 credits, $A L$, WR; LA, WR2, Not offered in 2010-2011
288. Shakespeare II Continuing the work begun in Shakespeare $I$, this course delves deeper into the Shakespeare canon. More difficult and obscure plays are studied alongside some of the more famous ones. While focusing principally on the plays themselves as works of art, the course also explores their social, intellectual, and theatrical contexts, as well as the variety of critical response they have engendered. Prerequisite: One Foundations course and Shakespeare I. 6 credits, $A L, W R ; L A, W R 2$, Spring-P. Hecker
289. Major Works of the English Renaissance: The Faerie Queene A study of Spenser's romance epic. 3 credits, AL; LA, WR2, Not offered in 2010-2011
290. Major Works of the English Renaissance: Paradise Lost An examination of Milton's masterwork. 3 credits, AL; LA, WR2, Not offered in 2010-2011
291. The Rise of the Novel A study of the origin and development of the English novel throughout the long eighteenth century. We will situate the early novel within its historical and cultural context, paying particular attention to its concern with courtship and marriage, writing and reading, the real and the fantastic. We will also consider eighteenth-century debates about the social function of novels and the dangers of reading fiction. Authors include Behn, Defoe, Haywood, Richardson, Fielding, Sterne, Walpole, and Austen. Prerequisite: One Foundations course and one other 6-credit English course. 6 credits, $A L$, WR; LA, WR2, Winter-J. Leiman
292. English Romantic Poetry "It is impossible to read the compositions of the most celebrated writers of the present day without being startled with the electric life which burns within their words"---P. B. Shelley. Readings in Blake, Wordsworth, Coleridge, Byron, Shelley, Keats, and their contemporaries. Prerequisite: One Foundations course and one other 6 -credit English course. 6 credits, $A L, W R ; L A$, WR2, Spring-C. Walker
293. Victorian Novel We will study selected British novels of the nineteenth century (Eliot's Middlemarch, Dickens' Bleak House, Carroll's Alice in Wonderland, Du Maurier's Trilby, C. Bronte's Jane Eyre, and E. Bronte's Wuthering Heights) as literary texts and cultural objects, examining the prose and also the bindings, pages, and illustrations of Victorian and contemporary editions. Using Victorian serial publications as models, and in collaboration with studio art and art history students, students will design and create short illustrated serial editions of chapters that will be exhibited in spring term. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
294. Victorian Poetry A study of Victorian poetry with particular emphasis on Pre-Raphaelite poetry and paintings. 6 credits, $A L$, WR; LA, WR2, Not offered in 2010-2011
295. The Literature of the Colonial U.S. A transcultural study of the literature produced in the seventeenth and eighteenth century expansion of European powers into North America, with emphasis on narratives of contact, the New England settlements, and literary responses to the Revolution and founding of the U.S. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
296. American Transcendentalism The roots and aims, friends and some enemies, of this nineteenth century reform movement, with particular attention to its literary aspects and its legacy in U.S. cultural history. Major works of Emerson, Thoreau, Margaret Fuller as well as of lesser figures. We will weigh the movement's contributions to religious and social reform and examine its politics, especially its relation to slavery and abolitionism, feminism, and the environment. 6 credits, $A L, W R ; L A, W R 2$, Not offered in 2010-2011
297. Studies in American Literature: Faulkner, Hemingway, and Fitzgerald An intensive study of the novels and short fiction of William Faulkner, Ernest Hemingway, and F. Scott Fitzgerald. The course will focus on the ethos of experimentation and the "homemade" quality of these innovative stylists who shaped the course of American modernism. Works read will be primarily from the twenties and thirties and will include The Sound and the Fury, In Our Time, Light in August, The Great Gatsby, The Sun Also Rises, and Go Down, Moses. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
298. Studies in American Literature: The Postmodern American Novel We will get lost in the funhouse of postmodern fiction, in whose mirrored rooms we will encounter Maxwell's Demon, a depressed Krazy Kat, and the icy imagination of the King of Zembla. (Time will be budgeted for sideexcursions into pastiche, dreck, and indeterminacy.) Authors read will include Nabokov, Pynchon, Bartheleme, and Delillo. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
299. Postcolonial Literature In Joseph Conrad's Heart of Darkness Marlow notes, "The conquest of the earth, which mostly means the taking it away from those who have a different complexion or slightly flatter noses than ourselves, is not a pretty thing when you look into it too much. What redeems it is the idea only." In this class we will explore both the ways in which this "idea" has been written about in European fictions about empire, and some responses to it from those on the receiving end. In particular, we will probe the ways in which the cultural identity of both the colonizer and the colonized are created, staged and written under colonialism and its aftermath. 6 credits, $A L, R A D$; LA, IS, Not offered in 20102011
300. Romance to Novel: Poe, Hawthorne, James Major works of these crucial United States writers in cultural contexts between 1830 and 1900. What did the nineteenth-century United States have to offer the ambitious, socially observant writer of fiction? What did United States audiences expect in a book? Attention to the gothic, Romanticism, psychological realism, and the emergence of the "international theme." Several tales and some literary theory from each, with longer works including Pym, Blithedale Romance, House of Seven Gables, and Portrait of a Lady. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
301. Art and Argument in U.S. Literary Realism From the 1870s to World War I, the realists produced novels they hoped would be aesthetically superior to those of the past as well as deeply responsive to the rapid social and moral changes of the era. Readings will be drawn from the fiction and theory of Twain, Howells, James, Crane, Jewett, Gilman, Wharton, Dreiser, and Du Bois. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
302. The American Novel: Origins to 1860 A survey of the novel in U.S. cultural and literary history from Revolutionary Era origins to the Civil War. What did eighteenth-century Americans find expressed in the gothic, picaresque, and sentimental novels they read? What did the latitude of fiction allow nineteenth-century romancers and reform-novelists to say that could be nowhere else so powerfully put? Works by Foster, Brockden Brown, Tenney, Cooper, Poe, Hawthorne, Fern, Melville. Prerequisite: One foundation course and one other 6-credit English course. 6 credits, $A L$, WR; LA, WR2, Offered in alternate years, Fall-P. Balaam
303. Ireland Program: Ireland in Place The course explores Irish culture, history, politics, and art through a study of modern and contemporary Irish literature. In Mayo, the group will read classic Irish poetry and short stories, including works by W.B. Yeats and Seamus O'Kelly; in Dublin, students will read Joyce, as well as works by Dubliners Frank O'Connor, Eavan Boland, Patrick Kavanah, and others; in Belfast, students will read contemporary Belfast writers including Seamus Heaney, Ciaran Carson, Glenn Patterson, Seamus Deane, and Brian Friel. The group will meet with writers in Belfast and Dublin, as well as attend plays, readings, and lectures. 6 credits, $A L$, WR; LA, WR2, Not offered in 20102011
304. The Postcolonial Novel: Forms and Contexts Authors from the colonies and ex-colonies of England have complicated understandings of the locations, forms and indeed the language of the contemporary English novel. This course will examine these questions and the theoretical and interpretive frames in which these writers have often been placed, and probe their place in the global marketplace (and awards stage). We will read writers such as Chinua Achebe, V.S Naipaul, Ngugi wa Thiong'o, Salman Rushdie, Nuruddin Farah, Arundhati Roy and Zadie Smith as well as some of the central works of postcolonial literary criticism. Prerequisite: One Foundations course and one other 6credit English course. 6 credits, AL, WR, RAD; LA, WR2, IS, Fall-A. Chakladar
305. Narrative Theory "Does the world really present itself to perception in the form of well-made stories?" asks Hayden White, metahistoriographer. To try to answer that question, we will read contemporary narrative theory by critics from several disciplines and apply their theories to literary texts, films, and cultural objects such as graphic novels, television shows, advertisements, and music
videos. Prerequisite: One Foundations course and one other 6-credit English course. 6 credits, $A L, W R$; LA, WR2, Offered in alternate years, Spring-S. Jaret McKinstry
306. Advanced Fiction Workshop An advanced course in the writing of fiction. Students will write three-four short stories or novel chapters which will be read and critiqued by the class. Students wishing to register for the course must first submit a portfolio of creative writing (typically a short story) to the instructor during registration (see the English Department's website for full instructions.) Final enrollment is based on the quality of the submitted work. Prerequisite: Written permission of instructor based upon portfolio submission. 6 credits, $S / C R / N C, A L$, WR; ARP, WR2, Spring-G. Smith
307. Advanced Poetry Workshop For students with some experience in writing poetry, this workshop further develops craft and vision. Readings and exercises will be used to expand the poet's individual range, and to explore the power of poetic language. Over the ten weeks, each poet will write and revise a significant portfolio. Students must submit three poems to the instructor prior to registration. Final enrollment is based on the quality of the submitted work. Prerequisite: Submit three poems to instructor. 6 credits, AL, WR; ARP, WR2, Winter-G. Hewett
308. Methods of Literacy Instruction Crosslisted with EDUC 379. This course introduces students to a variety of approaches and perspective in teaching English language arts in grades 5-12. We will explore methodologies and issues surrounding the teaching of reading, literature, language and composition in middle and high schools. In addition to the usual course components of reading, writing, and discussion approximately one day per week outside of class time will be devoted to observation and mini-teaching in 5-12 grade English classes in the Twin Cities. Prerequisites: Senior English major, permission of the instructor and Educational Studies 234. 6 credits, ND; NE, Winter-D. Appleman
309. Ireland Program: James Joyce's Ulysses and Dubliners James Joyce wanted "to write a novel about Dublin so complete that if the city one day suddenly disappeared from the earth, it could be reconstructed out of my book." Did he succeed? Students will study Ulysses with Professor Declan Kiberd, an internationally renowned expert on Joyce and Irish literature, editor of the Penguin edition of Ulysses, and author of two major critical studies: Inventing Ireland and Irish Classics. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
310. T. S. Eliot and the Metaphysical Poets We will examine the impact of Donne and his followers on T. S. Eliot and the founding documents of modernism (especially The Waste Land); assess Eliot's role in canonizing the metaphysical poets; and try to account for the literary and philosophical qualities which led Eliot to champion their work. Prerequisite: Prior completion of English 295 and one 300-level course. 6 credits, AL, WR; LA, WR2, Fall-T. Raylor
311. Moby-Dick and Its Contexts We will pursue Melville's sublime and shaggy romance of whale hunting in conjunction with other Melville works and in light of ideas in the water in 1850--patriarchy, democratic nationalism, romanticism, science and pseudo-scientific discourse, religious history, race, labor, gender. Following the book's critical and popular reception since Melville's time will enable us to chart the major movements in twentieth-century U.S. literary history. Prerequisite: Prior completion of English 295 and one 300-level course. 6 credits, AL, WR; LA, WR2, Winter-P. Balaam
312. Seductive Fictions Stories of virtue in distress and innocence ruined preoccupied English novelists of the eighteenth and nineteenth centuries. This course will focus on the English seduction novel, considering the following questions: What was the allure of the seduction plot? What does it reveal about sexual relations, gender, power, and class during this period? How does the seduction plot address and provoke concerns about novel-reading itself during a time when the novel was considered both an instrument of education and an agent of moral corruption? Authors include: Eliza Haywood, Samuel Richardson, Choderlos de Laclos, Thomas Hardy, and Bram Stoker. Prerequisite: Prior completion of English 295 and one 300-level English course. 6 credits, AL, WR; LA, WR2, Spring-J. Leiman
313. Integrative Exercise Senior English majors may fulfill the integrative exercise by completing one of the four options: the Colloquium Option (a group option in which participants discuss, analyze and write about a thematically coherent list of literary works); the Research Essay Option (an extended essay on a topic of the student's own devising; the Creative Option (creation of a work of literary art); or the Project Option (creation of an individual or group multidisciplinary project). The Research Essay Option is open to students who have completed a senior seminar in the major by the end of Fall term senior year. The Creative Option is open only to students who have completed at least two creative writing courses (one of which must be at the 300 level) by the end of Fall term senior year. 6 credits, $S / N C, N D$; NE, Fall, Winter, Spring-Staff

## Other Courses Pertinent to English

AMST 230 The American Sublime: Landscape, Character and National Destiny in Nineteenth Century America (Not offered in 2010-2011)

AMST 240 The Midwest and the American Imagination (Not offered in 2010-2011)
PHIL 395: Beckett
THEA 242 Twentieth Century American Drama (Not offered in 2010-2011)

## ENVIRONMENTAL STUDIES (ENST)

Directors: Professor Mark Kanazawa, winter and spring, Associate Professor Kimberly Smith, fall

Associate Professor: Kimberly Smith
Assistant Professors: Tsegaye Nega, Aaron M. Swoboda, George H. Vrtis
Visiting Instructor: Tevis Garrett Graddy
Adjunct Instructor: Wei-Hsin Fu
Committee Members: Cameron Davidson, Adrienne Falcón, Tricia Ferrett, Deborah Gross, Bereket Haileab, Daniel Hernandez, William E. Hollingsworth, David Hougen-Eitzman, Michael J. Kowalewski, Tun Myint, Beverly Nagel, Mary E. Savina, Joel Weisberg

The central mission of Carleton's Environmental Studies Program is to educate the next generation of environmental scholars and professionals in the fundamental scientific, ecological, social, ethical, political, and economic forces that govern environmental issues and the long-term quality and viability of society. The complexities of environmental problems dictate that study of the environment be based in multiple disciplines to provide students with skill sets and knowledge bases in the following areas: scientific principles as applied to the environment, the political, economic, social and cultural dimensions of environmental problems, the historical and ethical context for environmental problems and policy, and literary and artistic explorations of the environment. Students who major in Environmental Studies can gain a broad knowledge base in the natural sciences, social sciences and the humanities, which is intended to help them understand the complex environmental issues faced by societies around the world.

The major is designed to help students make connections across these key knowledge bases, which traditionally have been pursued largely in disciplinary isolation. In order to facilitate making these connections, the major is organized into a multidisciplinary set of core courses and four more narrowly defined areas of concentration, called foci. Students are required to complete all of the core courses and to select one of the foci as an area of concentration. The four foci, described in more detail below, are Food and Agriculture, Conservation and Development, Landscapes and Perception, and Water Resources. These foci are designed to provide students with both breadth and depth of knowledge in these topical fields.

The Environmental Studies major prepares students for meaningful involvement in a wide array
of environmental and governmental organizations, as well as for graduate study in many environmental fields, law, public policy, and other areas of inquiry.

## Requirements for a Major

In most cases, majors must complete 63 credits in the course categories listed below, which includes nine credits devoted to a group-based comprehensive exercise. This comprehensive exercise is described in detail on the Environmental Studies website. In exceptional circumstances, majors may do an individual comprehensive exercise for six credits, in which case they must complete 60 credits for the major.
I. Introductory Course (6 credits): Pick any one of the following:

BIOL 126 Energy Flow in Biological Systems
CHEM 128 Principles of Environmental Chemistry
ENTS 112 Conservation Biology (Not offered in 2010-2011)
GEOL 120 Introduction to Environmental Geology
II. Quantitative Methods ( 6 credits): Pick either of the following:

ENTS 120 Introduction to Geospatial Analysis
MATH 215 Introduction to Statistics
III. Core Courses (18 credits): Take all of the following:

BIOL 210 Global Change Biology
ENTS 271 Environmental Economics and Policy
HIST 195 American Environmental History
IV. Focus Electives ( 24 credits): All students must choose an area of specialization, or focus. Completion of a focus requires taking two courses in the natural sciences and two non-science courses. Focus requirements are listed below:

## (1)Food and Agriculture

(i) Environmental Science: Take any two of the following:

BIOL 236 Plant Biology
BIOL 238 Entomology
ENTS 260 Comparative Agroecology (Not offered in 2010-2011)
ENTS 288 Abrupt Climate Change (Not offered in 2010-2011)
GEOL 258 Geology of Soils (Not offered in 2010-2011)
GEOL 340 Hydrology
(ii) Society, Culture and Policy: Take any two of the following:

ECON 268 Economics of Cost Benefit Analysis
ECON 271 Economics of Natural Resources and the Environment
ECON 273 Water and Western Economic Development
ENTS 200 Conservation and Development in Tanzania and Ethiopia Program: Food and Agriculture
ENTS 215 Environmental Ethics
ENTS 246 Environmental and Agricultural Politics of the Americas
POSC 268 International Environmental Politics and Policies (Not offered in 2010-2011)
POSC 333 Sustainability Science* (Not offered in 2010-2011)
(2) Conservation and Development
(i)Environmental Science: Take any two of the following:

BIOL 221 Ecosystem Ecology
BIOL 250 Australia Program: Marine Biology (Not offered in 2010-2011)

BIOL 350 Evolution
BIOL 352 Population Ecology
BIOL 361 Tropical Rainforest Ecology
BIOL 374 Seminar: Grassland Ecology
ENTS 254 Topics in Landscape Ecology (Not offered in 2010-2011)
ENTS 288 Abrupt Climate Change (Not offered in 2010-2011)
(ii) Society, Culture \& Policy: Take any two of the following:

ECON 240 Microeconomics of Development
ECON 243 Economic Demography (Not offered in 2010-2011)
ECON 268 Economics of Cost Benefit Analysis
ECON 271 Economics of Natural Resources and the Environment
ENTS 200 Conservation and Development in Tanzania and Ethiopia Program: Food and Agriculture
ENTS 215 Environmental Ethics
ENTS 244 Conservation and Development in Tanzania: Biodiversity Conservation and Development
HIST 306 Topics in Environmental History: American Wilderness
POSC 211 Environment and the Evolution of Rules: Designing Institutions to Solve Political
Problems (Not offered in 2010-2011)
POSC 268 International Environmental Politics and Policies (Not offered in 2010-2011)
POSC 333 Sustainability Science* (Not offered in 2010-2011)
SOAN 210 Principles of Demography
SOAN 229 Demography of the Family
SOAN 234 Ecology, Economy, and Culture
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2010-2011)
(3) Landscapes and Perception
(i)Environmental Science: Take any two of the following:

BIOL 221 Ecosystem Ecology
ENTS 254 Topics in Landscape Ecology (Not offered in 2010-2011)
ENTS 260 Comparative Agroecology (Not offered in 2010-2011)
GEOL 210 Geomorphology
GEOL 258 Geology of Soils (Not offered in 2010-2011)
(ii) Society, Culture and Policy: Take any two of the following:

AMST 230 The American Sublime: Landscape, Character \& National Destiny in Nineteenth
Century America (Not offered in 2010-2011)
ARTS 113 Field Drawing
ARTS 212 Studio Art Seminar in the South Pacific: Mixed-Media Drawing
ARTS 275 Studio Art Seminar in the South Pacific: Physical/Cultural Environment of Australia and New Zealand
ENGL 236 American Nature Writing (Not offered in 2010-2011)
ENGL 247 The American West
ENGL 248 Visions of California
ENGL 331 American Transcendentalism (Not offered in 2010-2011)
ENTS 180 Basic Principles of Sustainable Design
ENTS 200 Conservation and Development in Tanzania and Ethiopia Program: Food and Agriculture ENTS 215 Environmental Ethics
ENTS 253 Social and Environmental Movements of Latin America
HIST 306 Topics in Environmental History: American Wilderness
PHIL 234 Aesthetics (Not offered in 2010-2011)
RELG 243 Native American Religious Freedom
RELG 356 Buddhism and Ecology (Not offered in 2010-2011)
SOAN 234 Ecology, Economy, and Culture

SOAN 266 Urban Sociology (Not offered in 2010-2011)
SPAN 260 Forces of Nature (Not offered in 2010-2011)
(4) Water Resources
(i) Environmental Science: Take any two of the following:

CHEM 328 Environmental Analysis
ENTS 288 Abrupt Climate Change (Not offered in 2010-2011)
GEOL 210 Geomorphology
GEOL 340 Hydrology
GEOL 370 Geochemistry of Natural Waters (Not offered in 2010-2011)
(ii) Society, Culture and Policy: Take any two of the following:

ECON 268 Economics of Cost Benefit Analysis
ECON 271 Economics of Natural Resources and the Environment
ECON 273 Water and Western Economic Development
ENTS 200 Conservation and Development in Tanzania and Ethiopia Program: Food and Agriculture
HIST 306 Topics in Environmental History: American Wilderness
POSC 211 Environment and the Evolution of Rules: Designing Institutions to Solve Political Problems (Not offered in 2010-2011)
POSC 268 International Environmental Politics and Policies (Not offered in 2010-2011)
POSC 333 Sustainability Science* (Not offered in 2010-2011)
V. Senior Seminar/Comprehensive Exercise (9 credits): Most students will take a 3-credit senior seminar, which is normally offered fall term, and then pursue a 6-credit group-based comprehensive exercise the following term. In exceptional circumstances, students may pursue an individual comprehensive exercise.

ENTS 395 Senior Seminar
ENTS 400 Integrative Exercise
ENTS 400 Integrative Exercise: Individual option

## Environmental Studies Courses

100. Science, Technology and Public Policy Science and technology have led to profound effects upon public life over the past century. This course will study the social and political impacts of scientific and technological developments on modern life. We will investigate particular cases drawn from across the sciences, such as genetics, energy production and consumption, nuclear weapons, and the information revolution. The relationship between government, the public, and the science/technology enterprise will be examined. What is, and what should be the role of the practitioners themselves? 6 credits, $S / C R / N C$, AI, WR1, QRE, Fall—J. Weisberg
101. Conservation Biology The current global rate of extinction of species is probably unprecedented in the history of the world, and the rate will increase dramatically in the coming decades. Conservation biology is a new synthetic discipline that emerged in the early 1980s to simultaneously address the scientific and social dimension of biodiversity conservation. The course presents an overview of the founding principles of conservation biology by examining the historic and present-day causes of species extinction, the biological bases central to species conservation, and the social dimension of conservation for sustainable management of biological diversity. 6 credits, MS; NE, Not offered in 2010-2011
102. Introduction to Geospatial Analysis Spatial data analysis using Geographic Information Systems (GIS), remote sensing, global positioning, and related technologies are increasingly important for understanding and analyzing a wide range of biophysical, social, and economic phenomena. This course serves as an overview and introduction to the concepts, algorithms, issues, and methods in describing, analyzing, and modeling geospatial data over a range of application areas. 6 credits, MS; SI, QRE,

## Fall-T. Nega

180. Basic Principles of Sustainable Design A holistic and integrated look at the fundamental and interdependent aspects of architecture and sustainable design, the impacts our buildings and choices have on the environment and ecology of the planet, and what we can do to mitigate those impacts. This course will provide students with a basic holistic knowledge of microclimate and siting, energy and resource efficiency, water, waste reduction, materials, and biological influences in sustainable design. 6 credits, ND; NE, Spring-S. Wolbert
181. Conservation and Development in Tanzania and Ethiopia Program: Food and Agriculture The production and consumption of food is a seemingly mundane activity in our lives. Yet, how we respond to food and our consumptive practices mirror our sense of place, our capacity for self-control, our health, the ways in which we impact the world food production system, and the natural environment. In this course, students will study modern agro-food systems and their social and ecological impacts in Ethiopia. The group will visit various sites throughout the program, including large and small scale farms, agro-forestry systems, and examples of urban agriculture. 6 credits, SS; NE, Winter-T. Nega
182. Environmental Ethics This course is an introduction to the central ethical debates in environmental policy and practice, as well as some of the major traditions of environmental thought. It investigates such questions as whether we can have moral duties towards animals, ecosystems, or future generations; what is the ethical basis for wilderness preservation; and what is the relationship between environmentalism and social justice. 6 credits, ND; HI, Fall-K. Smith
183. Conservation and Development in Tanzania: Biodiversity Conservation and Development How can the need for intensive human social and economic development be reconciled with the conservation of biodiversity? This course explores the wide range of actions that people take at a local, national, and international level to address this question. We will use political ecology and conservation biology as theoretical frameworks to examine the role of traditional and indigenous approaches to biodiversity conservation as well as contemporary debates about integrated conservation development across a spectrum of cultures in North America, Africa, Latin America, and Asia. Prerequisite: Sociology/Anthropology 110, 111, or permission of instructor. 6 credits, SS; SI, IS, QRE, Winter—T. Nega
184. Environmental and Agricultural Politics of the Americas We will explore policies and political institutions relating to the environment--and particularly agriculture--in North and South America. Topics will include carbon emissions, deforestation, water pollution, and the erosion and conservation of agricultural biodiversity, soil, and wildlife habitat. Using the theoretical perspective of political ecology, the course will investigate agencies, laws, trade deals, and paradigms affecting natural resource use and agri-food systems across the Americas. Key questions of the class are: what constitutes sustainable agriculture and ecological sustainability in general? How is sustainability contested and negotiated through politics? How could it be legislated or facilitated through policy? 6 credits, $S S, W R ; S I, W R 2, I S$, Spring-T. Graddy
185. Social and Environmental Movements of Latin America This course will explore influential social justice movements in Central and South America and the Caribbean, such as the Landless Peasants Movement of Brazil, the Zapatistas of southern Mexico, Via Campesina, Cuban urban garden projects, and Andean native seed activism. Topics will include land tenure, indigenous rights, development, community food security and sovereignty, racism, gender equity, labor, and the revaluation of "traditional ecological knowledges." Key questions include how are such movements articulating and actualizing alternative conceptions of "nature," and to what effect? After familiarizing ourselves with the issues, we will communicate with members of these movements, via teleconferencing. 6 credits, SS, WR; SI, WR2, IS, Spring—T. Graddy
186. Topics in Landscape Ecology Landscape ecology is an interdisciplinary field that combines the
spatial approach of the geographer with the functional approach of the ecologist to understand the ways in which landscape composition and structure affects ecological processes, species abundance, and distribution. Topics include collecting and referencing spatial data at broad scales, Geographic Information Systems (GIS), landscape metrics, simulating change in landscape pattern, landscape connectivity and meta-population dynamics, and reserve design. Prerequisites: Biology 125 and 126.6 credits, MS; SI, QRE, Not offered in 2010-2011
187. Comparative Agroecology As the world human population continues to expand, while at the same time the arable land base and fossil fuel supply shrink, the need for a sustainable food system is imperative. This course explores factors influencing food production and distribution at both local and national levels, with an eye towards how these factors affect choices made by the ultimate stewards of the land--the farmers. While the course focuses on the scientific aspects of agroecosystem sustainability, comparisons will be made among various production models both in the United States and China, bringing in social, economic and policy issues. Prerequisites: Biology 125 or 126 or Chemistry 123 or 128 or Geology 110 or 120 and permission of the instructor. This course is part of the OCS winter break China program, involving two linked courses in fall and winter terms, this class is the first class in the sequence. 6 credits, MS; NE, Not offered in 2010-2011
188. Field Investigation in Comparative Agroecology This course is the second part of a two-term course sequence beginning with Environmental and Technology Studies 260. The course begins with a two-week visit in December to Beijing and Sichuan province. Field work will include visits to Chinese farms at the forefront of an incipient sustainable agriculture movement in China, as well as discussions with Chinese sustainable agriculture researchers. In regular weekly meetings during the winter term on campus, data will be analyzed and presented in oral and written reports. Prerequisite: Environmental and Technology Studies 260. 6 credits, MS; NE, Not offered in 2010-2011
189. Environmental Economics and Policy This course will explore the economic and political institutions affecting the environment. The major questions of the course will be: When are individual economic incentives not aligned with society's environmental interests? How can policies and regulations be changed to best accomplish environmental goals? Will the economic development of economies like India and China lead to more or less environmental destruction? How can we best balance costs and benefits over long time horizons as we must in issues of non-renewable resource management and climate change? Topics to be discussed may include: climate change, agriculture, transportation, energy efficiency, population growth, and water. 6 credits, $S S$; SI, QRE, Spring-A.

## Swoboda

## 280. Conservation and Development in Tanzania:Research Methods on Conservation and

 Development This course will cover basic research methods in the social and natural sciences including how to collect, analyze, integrate, and report social and ecological data to critically understand and evaluate environmental issues in Tanzania and Ethiopia. Participants will work in small groups to develop and execute research projects which will be conducted in both countries in consultation with local faculty. 4 credits, SS; NE, Winter-T. Nega284. Conservation and Development in Tanzania: Cultural Studies This interdisciplinary course will use readings, meetings with local experts, guest lectures, and visits to cultural sites and museums to examine cultural practices in Tanzania and Ethiopia. 2 credits, $S / C R / N C$, ND; NE, Winter-T. Nega
285. Abrupt Climate Change The field of abrupt climate change seeks to understand very fast changes, or "tipping points," in historical climate records. Course topics will include interpretation of historical climate data, methods of measuring abrupt changes in ancient climates, theories for abrupt change, the role of complex earth systems, and the connection to current trends in global climate change. The course will also directly address our future vulnerability to abrupt climate change through cases studies of past human civilizations (Mayans, Anasazi). Prerequisites: One introductory course in Biology (125 or 126),

Chemistry (123 or 128), Geology (110 or 120), or Physics (two five-week courses from 131-162). 6 credits, MS, WR; NE, WR2, QRE, Not offered in 2010-2011
301. Science and Society Science today is hardwired into virtually every aspect of our lives and the world we inhabit so much so that there is no 'space' outside science. Our societies can equally well die of the production of science (e.g., global warming, species extinction) or safeguard itself from them. In such a context, how we understand science and with what tools is a key question. The aim of this course is to explore major approaches for understanding and explaining scientific knowledge and the implications of these approaches for understanding the place and importance of science in an age of global environmentalism. Prerequisite: Sociology/Anthropology 110, 111, or permission of instructor. 6 credits, ND; SI, Not offered in 2010-2011
395. Senior Seminar This seminar will focus on preparing Environmental Studies majors to undertake the senior comprehensive exercise. The seminar will be organized around a topic to-be-determined and will involve intensive discussion and the preparation of a detailed research proposal for the comps experience. The course is required for all Environmental Studies majors choosing the group comps option. Prerequisite: Completion of all other ENTS core courses except comps. 3 credits, ND; SI, FallG. Vrtis
400. Integrative Exercise In this course, ENTS majors complete a group-based comprehensive exercise. Each group is expected to research and execute a group project on the topic chosen by the group, under the guidance of an ENTS faculty member. Toward the end of winter term, all groups present their research at a Symposium sponsored by ENTS. Prerequisite: Environmental and Technology Studies 395.6 credits, $S / N C$, ND; NE, Winter-Staff

## EUROPEAN STUDIES CONCENTRATION (EUST)

Director: Associate Professor William North
The European Studies concentration provides an intellectual meeting ground for students interested in exploring of Europe from a variety of disciplinary and interdisciplinary perspectives. Drawing courses from a number of different departments, the program in European Studies allows students to integrate their study of a European language and an off-campus experience in Europe with a coherent set of courses on campus to achieve a greater understanding of both the new and the old Europes.

## Requirements for the Concentration

1. EUST 110: Introduction to European Studies: Europe as Idea and Union
2. Four transnational supporting courses that a) approach a theme or issue from a pan-European perspective OR b) compare European countries or regions OR c) compare Europe (or parts of Europe) with another part of the world. These courses will engage in an examination of such overarching issues as the relation between individual and community, cultural and linguistic diversity, and globalization. The list below is not exhaustive; students should consult with the concentration director regarding other courses that may fulfill this requirement.

ARTH 101 Introduction to Art History I
ARTH 102 Introduction to Art History II
ARTH 170 Printmaking: The First Media Revolution (Not offered in 2010-2011)
ARTH 172 Modern Art: 1890-1945
ARTH 223 Women in Art
ARTH 240 Art Since 1945
ARTH 286 Legacies of the Avant-Garde: Dada Then and Now

CAMS 211 Film History II
CAMS 214 Film History III
CAMS 217 Border Crossings: Postmodern Perspectives on French and German Cinema
ECON 233 European Economic History
ECON 236 Economics of the European Union
ECON 250 History of Economic Ideas (Not offered in 2010-2011)
ENGL 114 Introduction to Medieval Narrative (Not offered in 2010-2011)
ENGL 309 Renaissance Selves (Not offered in 2010-2011)
EUST 278 Cross-Cultural Psych Seminar in Prague: Politics and Culture in Central Europe in the Twentieth Cent
FREN 249 French Studies Seminar in Paris: European Identities: Paris and Geneva
FREN 349 French Studies Seminar in Paris: European Identities: Paris and Genva
FREN 360 Topics in French Studies: Algeria-France (Not offered in 2010-2011)
GERM 230 From Gutenberg to Gates: The History and Practice of Printing (Not offered in 20102011)

GERM 249 Tense Affinities: A History of German Jewish Culture
HIST 138 The Making of Europe
HIST 139 Foundations of Modern Europe (Not offered in 2010-2011)
HIST 140 Modern Europe 1789-1914
HIST 141 Europe in the Twentieth Century (Not offered in 2010-2011)
HIST 230 Institutional Structure and Culture in the Middle Ages (Not offered in 2010-2011)
HIST 232 Renaissance Worlds in France and Italy
HIST 233 Cultures of Empire: Byzantium, 710-1453
HIST 236 Women's Lives in Pre-Modern Europe (Not offered in 2010-2011)
HIST 237 The Enlightenment (Not offered in 2010-2011)
HIST 238 Topics in Medieval History: Church, Papacy and Empire (Not offered in 2010-2011)
HIST 249 Modern Central Europe
HIST 333 Iconoclasm (Not offered in 2010-2011)
MELA 230 Jewish Collective Memory
MUSC 111 Western Art Music and Western Civilization
MUSC 120 Introduction to Opera
MUSC 122 Symphonies from Mozart to Mahler
MUSC 210 Medieval and Renaissance Music (Not offered in 2010-2011)
MUSC 211 Baroque and Classical Music
MUSC 312 Romantic Music (Not offered in 2010-2011)
PHIL 272 Modern Philosophy
PHIL 274 Existentialism
POSC 120 Comparative Political Regimes
POSC 247 Comparative Nationalism
POSC 263 European Political Economy
POSC 268 International Environmental Politics and Policies (Not offered in 2010-2011)
POSC 276 Arendt: Imagination and Politics
POSC 350 Nietzsche and Political Philosophy*
POSC 352 Political Theory of Alexis de Tocqueville* (Not offered in 2010-2011)
POSC 358 Comparative Social Movements*
POSC 383 European Political Economy Seminar in Madrid and Maastricht: Politics of the European Union
RELG 231 From Luther to Kierkegaard
RELG 287 Many Marys
RELG 329 Theology, Pluralism, and Culture (Not offered in 2010-2011)

RELG 380 Radical Critiques of Christianity (Not offered in 2010-2011)
3. Two country-specific supporting courses in the participating disciplines, each of which focuses on a particular European country or region. Country-specific courses need not address panEuropean issues, but students will be expected to bring a comparative awareness of Europe to their learning experience.

ARTH 230 The Sistine Chapel (Not offered in 2010-2011)
ARTH 234 Italian Renaissance Art (Not offered in 2010-2011)
ARTH 238 Rembrandt, Vermeer and Netherlandish Art (Not offered in 2010-2011)
ARTH 251 Ruins and Romantics: English Gothic and Gothic-Revival Art and Architecture
CAMS 213 Italian Neorealism and Global Cinema
ECON 221 Cambridge Program: Contemporary British Economy
ECON 222 Cambridge Program: The Industrial Revolution in Britain
ECON 224 Cambridge Program: British Cultural Exports
ENGL 210 Medieval and Renaissance English Literature
ENGL 213 Christopher Marlowe
ENGL 214 Revenge Tragedy
ENGL 218 The Gothic Spirit
ENGL 222 The Art of Jane Austen
ENGL 244 Shakespeare I
ENGL 281 English Theater and Literature Seminar in London: Regency London
ENGL 282 English Theater and Literature Seminar in London: London Theater
ENGL 285 The Arts of Power: Poetry, Painting, and Propaganda at the English Court (1509-1685)
ENGL 301 The Courtly Chaucer (Not offered in 2010-2011)
ENGL 310 Shakespeare II
ENGL 313 Major Works of the English Renaissance: The Faerie Queene (Not offered in 20102011)

ENGL 314 Major Works of the English Renaissance: Paradise Lost (Not offered in 2010-2011)
ENGL 323 English Romantic Poetry
FREN 233 The French Cinema (Not offered in 2010-2011)
FREN 240 Introduction to French and Francophone Studies: Growing up French
FREN 241 The Lyric and Other Seductions
FREN 243 Cultural Reading
FREN 246 French Studies Seminar in Paris: City of Wonders: Paris in the Arts
FREN 249 French Studies Seminar in Paris: European Identities: Paris and Geneva
FREN 340 Arts of Brevity: Short Fiction
FREN 341 Madame Bovary and Her Avatars
FREN 349 French Studies Seminar in Paris: European Identities: Paris and Genva
FREN 351 Topics in Sixteenth Century Literature: Metamorphoses: Love, War and Monsters in Early Modern France (Not offered in 2010-2011)
FREN 352 The Court and its Dissenters (Not offered in 2010-2011)
FREN 395 Cultures of Autobiography
GERM 205 Berlin Program: Intermediate Composition and Conversation (Not offered in 20102011)

GERM 207 Young Adult Literature (Not offered in 2010-2011)
GERM 216 Studies in German Cinema: Current Issues in Contemporary Film (Not offered in 20102011)

GERM 231 Damsels, Dwarfs, and Dragons: Medieval German Literature
GERM 244 Berlin Program: Theater in Berlin (Not offered in 2010-2011)
GERM 247 Fairy Tales, Myths, and Legends (Not offered in 2010-2011)
GERM 295 Berlin: The German Metropolis (Not offered in 2010-2011)

GERM 312 Rilke and His Circle
GERM 346 Viennese Culture on Site (Not offered in 2010-2011)
GERM 351 The Age of Goethe (Not offered in 2010-2011)
GERM 355 Topics in German Drama: Twentieth Century Theatrical Experiments (Not offered in 2010-2011)
HIST 235 Dante's Italy (Not offered in 2010-2011)
HIST 238 The World of Bede (Not offered in 2010-2011)
HIST 239 Britain, c. 1485-1834: From Sceptred Isle to Satanic Mills (Not offered in 2010-2011)
HIST 240 Imperial Russia (Not offered in 2010-2011)
HIST 241 Russia through Wars and Revolutions (Not offered in 2010-2011)
HIST 243 The Peasants are Revolting! Society and Politics in the Making of Modern France (Not offered in 2010-2011)
HIST 245 Ireland: The Origin of the Troubles (Not offered in 2010-2011)
HIST 248 Berlin Program: Monuments and Memory: A Cultural History of Berlin (Not offered in 2010-2011)
HIST 250 Modern Germany
HIST 330 Gender, Ethics and Power in Medieval France (Not offered in 2010-2011)
HIST 346 The Holocaust
MELA 240 Turkey Today: An Introduction
MELA 241 Ottoman-Turkish History Through Music
MELA 242 Ethnographies of Turkey
POSC 388 European Political Economy Seminar in Madrid and Maastricht:Spanish Politics and Political Economy
RUSS 150 Contemporary Russian Culture and Society (Not offered in 2010-2011)
RUSS 205 Russian in Cultural Contexts
RUSS 227 Moscow Program: Russia East and West (Not offered in 2010-2011)
RUSS 244 Russian Literature in Translation: The Novel to 1917
RUSS 255 Russian Cinema: History and Theory (Not offered in 2010-2011)
RUSS 266 Dostoevsky
RUSS 267 War and Peace
RUSS 268 Russian Fiction of the Soviet Period (Not offered in 2010-2011)
RUSS 331 Russia's Literature of the Uncanny
RUSS 334 Russian Poetry (Not offered in 2010-2011)
RUSS 336 Pushkin (Not offered in 2010-2011)
RUSS 345 Russian Cultural Idioms of the Nineteenth Century (Not offered in 2010-2011)
RUSS 351 Chekhov
RUSS 395 Senior Seminar: The Cult of Stalin (Not offered in 2010-2011)
SPAN 209 Spanish Seminar in Madrid: Current News
SPAN 240 Introduction to Spanish Literature (Not offered in 2010-2011)
SPAN 244 Spain Today: Recent Changes through Narrative and Film
SPAN 247 Spanish Seminar in Madrid: Spanish Art from El Greco to Picasso
SPAN 250 Spanish Cinema (Not offered in 2010-2011)
SPAN 256 Lorca, Buñuel, and Dalí: Poetry, Film, and Painting in Spain (Not offered in 2010-2011)
SPAN 301 Tragedy (Not offered in 2010-2011)
SPAN 320 New Spanish Voices
SPAN 328 The Roaring Twenties (Not offered in 2010-2011)
SPAN 330 The Invention of the Modern Novel: Cervantes' Don Quijote
SPAN 331 Renaissance and Baroque
SPAN 349 Spanish Seminar in Madrid: Theory and Practice of Urban Life
SPAN 358 Topics in Hispanic Literature: The Spanish Civil War (Not offered in 2010-2011)
4. Proficiency (as defined by the College) in a European language other than English. Students are encouraged to take language courses beyond the minimum requirement.

FREN 204 Intermediate French
GERM 204 Intermediate German
RUSS 204 Intermediate Russian
SPAN 204 Intermediate Spanish
5. EUST 398: Senior Colloquium.
6. Concentrators must normally participate in an off-campus study program in Europe.
7. The overall balance of courses must include a reasonable mix of disciplines and course levels (100s, 200s, 300s). While this balance will be established for each individual student in consultation with the concentration coordinator, no more than half of the required minimum of courses may be in one department, and at least half of the required minimum of courses must be above the 100 -level. The total number of credits required to complete the concentration is 45 .

## European Studies Courses

110. Europe as Idea and Union The first half of this course will examine the idea of Europe and how it has been articulated and debated through history. Where does Europe begin and end, geographically and historically, and what has it meant politically and culturally? Then, we will examine the European Union as a political institution and economic entity and as it has coalesced historically. A particular focus on issues of expansion and identity in recent years will occupy us as well. 6 credits, $H U, W R ; H I, W R 2, I S$, Offered in alternate years, Fall-D. Tompkins
111. Cross-Cultural Psych Seminar in Prague: Politics and Culture in Central Europe in the Twentieth Cent This course covers important political, social, and cultural developments in Central Europe during the twentieth century. Studies will explore the establishment of independent nations during the interwar period, Nazi occupation, resistance and collaboration, the Holocaust and the expulsion of the Germans, the nature of the communist system, its final collapse, and the postcommunist transformation. 6 credits, SS; HI, IS, Fall—Non-Carleton faculty
112. Senior Colloquium Culminates in a final oral presentation that will allow concentrators to synthesize and reflect upon their diverse European studies, including on-campus and off-campus classwork, internships, and cross-cultural experiences. 3 credits, ND; NE, Spring—Staff

## FRENCH (FREN)

## FRENCH AND FRANCOPHONE STUDIES (FRST)

Chairs: Professor Cathy M. Yandell<br>Professors: Scott D. Carpenter, Chérif Keïta, Éva Pósfay, Dana J. Strand, Cathy M. Yandell<br>Visiting Assistant Professor: Stephanie M. Cox<br>Visiting Lecturer: Annick Fritz-Smead<br>Senior Lecturers: Christine Lac, Cynthia Luck Shearer

## General Information

The French and Francophone Studies Department sees language as fundamental to the study of literatures and cultures. Committed to helping students attain proficiency in the language sequence (FREN 101-204), the Department strives at all levels to introduce students to the rich and complex endeavors of literary and cultural analysis. Operating study abroad programs in Mali and Paris, we provide opportunities for using and enhancing these skills in situ, broadening horizons while also
training students in one of the world's major languages. Our programs in literary and cultural studies are appropriate for students wishing to do advanced work in French or who hope to use French language or important critical skills in future careers or studies.

Language Courses: Language courses 101, 102, 103, 204 are a sequential series of courses designed to prepare the student in the basic language skills (listening, speaking, reading, and writing) through the study of grammar, literature, and culture, and/or to provide the foundation for pursuing advanced work in language and literature. French 206 and 309 are designed to develop the student's spoken and written mastery of the language through compositions and intensive oral work based on cultural and literary topics. Admission to these courses is determined either by appropriate high school CEEB or Carleton placement test scores, or by completion of the previous course in the sequence with a grade of C - or better.

Literature Courses: We examine literary works for both their aesthetic and human values. Our literature courses have a number of goals: to refine and expand students' linguistic ability, to broaden their cultural understanding, to improve their ability to engage in literary analysis, to enhance their knowledge of literary history and criticism, and to help students better understand themselves and the human condition. In our discussions, we address universal themes and concerns, but we also try to uncover what is peculiarly French or Francophone about the works.

## Requirements for an Arts and Literature Track

The Arts and Literature Track consists of intensive work in language, and literature, and may include courses in film or other arts. All courses in the Arts and Literature Track are conducted in French.

Sixty-nine credits beyond French 204 including:

1. Core courses: French 309, Beyond Words: The Fine Art of Writing in French

Literary and Cultural Studies 245, Introduction to Critical Methods: Structure, Gender, Culture, (usually taken in the junior year)
2. Fifty-four credits in departmental electives. Students should generally begin with courses at the 200-level (French 206, 240, 241, 243, etc.), but at least thirty-six credits at the 300 -level (French 309 and French 400 do not count in this category).

All courses conducted in French on the Paris and Mali programs may be applied to this category, as long as the requisite number of 300 -level credits is attained.
3. Integrative Exercise: During their senior year students will expand and deepen an essay in French from one of their advanced courses in the major. Normally, but not always, the director for this project will be the professor from that course. This essay may be completed during any term, but must be finished early in the spring term, when an oral presentation (in English) of the work will be presented. The integrative exercise counts for three credits.

## Requirements for a Cultural Studies Track

The Cultural Studies Track is interdisciplinary in nature: students will take courses in French and Francophone literature and other media, but also in such fields as history, art history, political science, etc. Courses outside the department will generally not be taught in French.

Sixty-nine credits beyond French 204 including the following (please note that any given course will not count in more than one category):

1. Literature and language: At least five French language or literature courses, four of which must be at the 300 -level, and one of which must be French 309, Beyond Words: The Fine Art of Writing in French
2. At least one course in cultural studies such as: 243, Topics in Cultural Studies; 249/349, Paris Program: European Identities: Paris and Geneva; 250, Mali Program; Film and Society in Mali
3. At least one course in history or methodology such as: LCST 245, Introduction to Critical Methods: Structure, Gender Culture, FREN 251, Mali Program: Negotiating the Past: The Challenges of Nation-building in Mali; HIST 237, The Enlightenment
4. Elective courses: Up to three additional courses in FREN or from other departments or
programs (see pre-approved courses under the concentration in French and Francophone Studies), with director's approval.
5. Capstone seminar: This senior seminar (usually, but not always, French 395) is an advanced interdisciplinary seminar focused on a particular topic and the methodology used for its study.
6. The Integrative Exercise: During their senior year students will expand and deepen an essay in French from one of their advanced courses in the major. Normally, but not always, the director for this project will be the professor from that course. This essay may be completed during any term, but must be finished early in the spring term, when an oral presentation (in English) of the work will be presented. Although the initial paper may have been written in English, the essay for the integrative exercise will be in French. The integrative exercise counts for three credits.

A special major in Romance Languages (a combination of French and Spanish language and literature) is available by petition through the Academic Standing Committee. The integrative exercise counts for three credits.

Concentration: See separate section for French and Francophone Studies Concentration.
Programs Abroad: Participation in a Carleton or in another approved foreign study program is highly recommended for students majoring or concentrating in the above areas. The department operates programs in Paris and in Mali, but non-Carleton programs are available, too. Students interested in study abroad should consult the section on international off-campus programs, and discuss alternatives with faculty in French and with the Director of Off-Campus Studies.

Certificate of Advanced Study in Foreign Language and Literature: In order to receive the Certificate of Advanced Study in French, students must fulfill the general requirements (refer to Academic Regulations) in the following course distribution: 36 credits completed with a grade of C- or better in French beyond 103, including at least two upper-level literature courses (300-395). Although courses for the certificate may be taken on a S/CR/NC basis, "D" or "CR" level work will not be sufficient to satisfy course requirements. No more than 12 credits from non-Carleton off-campus studies programs may be applied toward the certificate.

Language House: Students have the opportunity to immerse themselves in the language by living in the Language House. The Associate is a native speaker, and students organize and participate in numerous cultural activities in the Language House.

## French and Francophone Studies Courses

101. Elementary French This course introduces the basic structures of the French language, everyday vocabulary and cultural situations. Students practice all four skills (reading, writing, listening, and speaking) in French. Taught five days a week in French. Prerequisite: none (Placement score for students with previous experience in French). 6 credits, ND; NE, Fall—Staff
102. Elementary French This course introduces complex sentences and various tenses through short literary and cultural texts. Students practice all four skills (reading, writing, listening, and speaking) in French. Taught five days a week in French. Prerequisite: French 101 or placement score. 6 credits, ND; NE, Winter-Staff
103. Intermediate French This course reviews basic and complex sentence patterns in greater depth through the discussion of authentic short stories. Students practice all four skills (reading, writing, listening, and speaking) in French. Taught five days a week in French. Prerequisite: French 102 or placement score. 6 credits, ND; NE, Fall, Spring—Staff
104. Intermediate French Through discussion of book-length literary and cultural texts (film, etc.), and including in-depth grammar review, this course aims to help students acquire greater skill and confidence in both oral and written expression. Taught three days a week in French. Prerequisite: French 103 or placement score. 6 credits, ND; NE, Fall, Winter-Staff
105. Contemporary Francophone Culture This course focuses on developing students' skills in French conversation and composition through the discussion of contemporary Francophone culture: current political and social issues, film, and music. Prerequisite: French 204 or the equivalent. 6 credits, ND; NE, IS, Winter-C. Yandell
106. Paris Program: Conversation and Composition Focusing on topics of current interest in French society, this course is designed to help students gain ease and proficiency in spoken and written French. While providing some focused work on language skills, emphasis will be placed on cultural issues, often drawing on current events. The course will be taught and supervised by local instructors. Conducted in French. 6 credits, AL; HI, Spring—Non-Carleton Faculty
107. Coffee and News Keep up your French while learning about current issues in France, as well as world issues from a French perspective. Class meets once a week for an hour. Requirements include reading specific sections of leading French newspapers, (Le Monde, Libération, etc.) on the internet, and then meeting once a week to exchange ideas over coffee with a small group of students. Prerequisite: French 204 or permission of the instructor. 2 credits, S/CR/NC, ND; HI, Fall, Winter, Spring-S. Cox
108. The French Cinema In this overview of the major trends in French cinema, we will consider the intersections of the political, social, cultural, and artistic dimensions of films by a number of different French directors. Discussions will focus on such questions as the following: In what ways has French cinema mobilized (or undermined) national myths? What role has film played in mediating the French historical memory? How have French films dealt with the nation's (colonial) others? Course materials will incorporate critical theory and cultural readings. Taught in English with all films subtitled. 6 credits, AL; LA, Not offered in 2010-2011
109. Francophone Literature of Africa and the Caribbean Reading and discussion of literary works, with analysis of social, historical and political issues. Conducted in English. 6 credits, $A L, R A D ; L A, I S$, Winter-C. Keïta
110. Introduction to French and Francophone Studies: Growing up French Through the ages, writers and filmmakers have been drawn to the mystery and meaning of childhood and adolescence. In this course, we will explore the experience of growing up French (and Francophone) in works from post-Revolutionary France to twentieth century Morocco. Taught in French. Prerequisite: French 204 or equivalent. 6 credits, AL; LA, IDS, Fall-D. Strand
111. The Lyric and Other Seductions French lyric poetry occupies a privileged position in the literary landscape of the nineteenth and twentieth centuries. However, it also shares a common heritage with less literary siblings, such as popular music and even advertising. Starting with the study of such poets as Lamartine, Desbordes-Valmore, Baudelaire, Mallarmé, Valéry, and Bonnefoy, we will also investigate poetic techniques in popular songs and contemporary ads. Conducted in French. Prerequisite: French 204. 6 credits, AL; LA, Winter-S. Carpenter
112. Cultural Reading We will analyze various very recent novels, films or popular songs as cultural texts reflecting current concerns in French society. We will study authors such as Gavalda or Barbery and directors Berri, Klapisch, Boon or Kechiche to gather insights about integration and marginalization, aging boomers and the younger crowd, cities, suburbs, Paris, regions, food and lodging in today's French culture. Course may be repeated if the topic is different. Prerequisite: French 204. 6 credits, AL; HI, Spring-C. Lac
113. Francophone Literature of Africa and the Caribbean Reading and discussion of literary works, with analysis of social, historical and political issues. Prerequisite: French 204. 6 credits, AL, RAD; LA, Not offered in 2010-2011
114. French Studies Seminar in Paris: City of Wonders: Paris in the Arts Home of some of the finest and best-known museums in the world, Paris has long been recognized as a center for artistic
activity. Students will have the opportunity to study French art of the last two centuries onsite: in-class lectures and discussions will be complemented by guided visits to the unparalleled collections of the Louvre, the Musée d'Orsay, the Centre Pompidou, local art galleries, and other appropriate destinations. Special attention will be paid to the program theme. Conducted in French. Prerequisite: French 204. 6 credits, $A L$; LA, IS, Spring-É. Pósfay
115. French Studies Seminar in Paris: European Identities: Paris and Geneva How does place shape and mirror cultural identity? How does it express cultural belonging (or alienation)? How does it manifest its distinctiveness? Paris will serve as our hands-on laboratory as we explore (re)definitions of French identity in a continually evolving European Union. Through readings and on-site visits, we will study a variety of "places" in Paris, from iconic public monuments to idealized gardens to (sub)urban non-places. Examples from another European site, Geneva, and a trip to this "smallest metropolis in the world" nestled between the Alps and the Jura, will both further our understanding of the french experience and shed light on facets of Swiss Francophone identity. Prerequisite: French 204. 6 credits, AL, RAD; HI, IS, Spring-É. Pósfay
116. The French Art of Living Well: Tradition, Myth, Reality The French have been associated, both in stereotypes and in their own proclamations, with a certain ?joie de vivre.? Through literature, art, architecture, and theory, students will explore French notions of what it means to live well, from Renaissance sumptuousness to existentialist questioning to the depiction of immigrants' lives in contemporary Paris. The program will examine the ways in which the physical environment fashions attitudes and practices that define the good life (urban and rural settings, the north and the south, housing projects and seascapes). Whenever possible, course readings and student writing will be linked with experiential learning in Paris and southern France. Prerequisite: French 204. 6 credits, $A L$; $L A, I S$, Spring-Cathy Yandell
117. Mali Program: Film and Society in Mali This course will concentrate on the dynamics of traditional orality within the art of cinema in Mali. Feature films and documentaries by award-winning filmmakers such as Soulemane Cissé, Cheick Oumar Sissoko, Adama Drabo, Dany Kouyaté, and Abderrahmane Sissako will be screened and analyzed. Discussions with some of these filmmakers will introduce the student to the challenges and success of filmmaking in economically-challenged countries such as Mali and Burkina Faso. 6 credits, AL, RAD; LA, IS, Not offered in 2010-2011
118. Mali Program: Negotiating the Past: The Challenges of Nation-building in Mali This course will look at various issues in Malian history (ancient and modern) and the process of political and economic change. A component of this course will be an introduction to conversational Bambara, the lingua franca of Mali. 4 credits, AL, RAD; HI, IS, Not offered in 2010-2011
119. Mali Program: Literature and Society in Mali This course will focus on the theme of social change in different genres of Malian literature, from the colonial period to the present. By studying oral and written works by traditional and modern poets, novelists, and playwrights such as Seydou Badian and Massa Makan Diabaté, Moussa Konaté, and Amadou Hampaté Bâ, the student will get an understanding of issues such as education, marriage, and traditional vs. modern political power in contemporary Malian society. Meeting will be arranged with many writers and oral performers. 6 credits, $A L, R A D ; L A, I S$, Not offered in 2010-2011
120. France and the African Imagination This course will look at the presence of France and its capital Paris in the imaginary landscape of a number of prominent African writers, filmmakers and musicians such as Bernard Dadié ( Côte d’ Ivorie), Ousmane Sembène (Senegal), Calixthe Béyala (Cameroun), Alain Mabanckou (Congo-Brazzaville), Salif Keïta (Mali) and others. The history of Franco-African relations will be used as a background for our analysis of these works. Conducted in French. 6 credits, AL; LA, IS, Not offered in 2010-2011
121. Beyond Words: The Fine Art of Writing in French In this course we analyze and use the many
linguistic and rhetorical devices the French language offers us. To do so, we study, translate and emulate various types of texts and develop our sense of style in French. In order to contextualize language use, we work on functional projects, which may include subtitling of films, translating picture books, composing an academic paper, or creating a website. Overall, we will focus on developing a continued appreciation for words and language. Required for the major in French. Prerequisite: at least one course above French 204. 6 credits, $A L$; LA, IS, Spring-C. Keïta
122. Arts of Brevity: Short Fiction The rise of newspapers and magazines in the nineteenth century promotes a variety of short genres that will remain popular to the present day: short stories, prose poetry, vignettes, theatrical scenes. In this short course (first five weeks of the term) we'll study short works by such authors as Diderot, Sand, Balzac, Mérimée, Flaubert, Allais, Tardieu, Le Clézio. Conducted in French. Prerequisite: French 204; recommended preparation: French 206, 240, or 241. 3 credits, $A L$; LA, IS, Fall-S. Carpenter
123. Madame Bovary and Her Avatars Decried as scandalous, heralded as the first "modern" novel, Gustave Flaubert's Madame Bovary (published in 1857) sparked debate, spawned both detractors and followers, and became a permanent fixture in French culture and even the French language. In this fiveweek course we will read the novel, study its cultural context and impact, and see how it has been variously re-interpreted in film and other media. Conducted in French. Prerequisite: French 204; recommended preparation: French 206, 240, or 241.3 credits, AL; LA, IS, Fall-S. Carpenter
124. French Studies Seminar in Paris: European Identities: Paris and Genva How does place shape and mirror cultural identity? How does it express cultural belonging (or alienation)? How does it manifest its distinctiveness? Paris will serve as our hands-on laboratory as we explore (re)definitions of French identity in a continually evolving European Union. Through readings and on-site visits, we will study a variety of "places" in Paris, from iconic public monuments to idealized gardens to (sub)urban non-places. Examples from another European site, Geneva, and a trip to this "smallest metropolis in the world" nestled between the Alps and the Jura, will both further our understanding of the french experience and shed light on facets of Swiss Francophone identity. Prerequisite: French 204. Students will be expected to read more and write longer papers if they register for French 349.6 credits, $A L$, RAD; HI, IS, Spring-É. Pósfay
125. The Art of French Living: Tradition, Myth, Reality The French have been associated, both in stereotypes and in their own proclamations, with a certain ?joie de vivre.? Through literature, art, architecture, and theory, students will explore French notions of what it means to live well, from Renaissance sumptuousness to existentialist questioning to the depiction of immigrants' lives in contemporary Paris. The program will examine the ways in which the physical environment fashions attitudes and practices that define the good life (urban and rural settings, the north and the south, housing projects and seascapes). Whenever possible, course readings and student writing will be linked with experiential learning in Paris and southern France. $\langle\mathrm{hr} />$ REVISION: The French have been associated, both in stereotypes and in their own proclamations, with a certain ?joie de vivre.? Through literature, art, architecture, and theory, students will explore French notions of what it means to live well, from Renaissance sumptuousness to existentialist questioning to the depiction of immigrants' lives in contemporary Paris. The program will examine the ways in which the physical environment fashions attitudes and practices that define the good life (urban and rural settings, the north and the south, housing projects and seascapes). Whenever possible, course readings and student writing will be linked with experiential learning in Paris and southern France. Prerequisite: 204. 6 credits, $A L$; LA, IS, Spring-Cathy Yandell
126. Topics in Sixteenth Century Literature: Metamorphoses: Love, War and Monsters in Early Modern France The French Renaissance continues to intrigue students and critics by its propensity for paradox, ambiguity, and contradiction. Just as literature and the arts reached new levels of aesthetic
achievement, the bloodiest civil war in French history was taking shape. Lyric poetry, bawdy tales, essays and chronicles depict beautiful bodies and monsters, war and peace, hatred and love. Through such authors as Rabelais, Marguerite de Navarre, Ronsard, Louise Labé and Montaigne, as well as artistic and musical works, we will investigate the multiple worlds of French renaissance culture. Recommended preparation: French 240-level course or the equivalent. 6 credits, AL; LA, IS, Not offered in 2010-2011
127. The Court and its Dissenters Seventeenth-century France is often touted as the pinnacle of French grandeur. Under Louis XIV's absolutist rule, France supported an astounding number of normative measures--from founding academies to policing codes of behavior--designed to help the French nation to become a political, economic and cultural world power. But in the midst of all these pressures towards normativeness, could one express any dissent in the age of Versailles? To answer this question we will examine the creative (and irreverent) strategies used by a whole range of authors such as Molière, Racine, Lafayette, Fènelon, and many more. Conducted in French. Recommended preparation: French 240-level course or equivalent. 6 credits, AL; LA, IS, Not offered in 2010-2011
128. Topics in French Studies: Algeria-France For the historian Benjamin Stora, the close and complex bond between France and Algeria is like a marriage, plagued by inequality and betrayal, and doomed to a violent divorce the repercussions of which are still being felt on either side of the Mediterranean. In this interdisciplinary course we will explore the 175-year relationship between Algeria and France through literary and historical texts and film. The course syllabus may include works by Assia Djebar, Albert Camus, Brigitte Rouan, Benjamin Stora, Tahar Djaout, Gillo Pontecorvo, Frantz Fanon, and Jacques Derrida. Taught in French. Prerequisites: 200-level French literature course or equivalent. 6 credits, $A L$; LA, IS, Not offered in 2010-2011
129. Identity in Progress in Quebec In this course, we will examine the québécois quest for identity through novels, plays, films and folktales from the twentieth century. With the objective to understand Quebec's contemporary culture, we will try to answer the following questions: How can bilingualism divide a country? Why did French-Canadians feel like second-class citizens in the 1950s? What happened to the indigenous populations in the debate of cultural distinctiveness? Why did Quebec's women's movement fare better than in France? Finally, we will discuss the impact of immigrant writings on the issue of identity. Conducted in French. 6 credits, AL; LA, IS, Not offered in 2010-2011
130. Transnational Writers in Quebec In this course, we will examine those often viewed as the "outsiders" of Quebec literature: the immigrant writers, the Anglophone writers of Montreal and the First Nation writers. Because of Quebec's unique place and history within North America, its literary production reflects a culture whose sense of self is defined and shifts according to the gaze of several Others, the Anglo-Canadian, the American or the French. Therefore, Quebec's literature offers a natural hearth for transnational and transcultural authors. Readings will include authors who live or publish in Quebec but who are born outside of Canada. (Taught in French) 6 credits, AL; LA, Spring-S. Cox
131. Cultures of Autobiography The genre of autobiography raises questions of identity, ethnicity, politics, race, and sexuality. Despite its apparent focus on the self, autobiography inevitably reveals much about the culture from which it emerges, and this class will focus particularly on those cultural revelations and intersections. Readings will include such classic French authors as Montaigne, Rousseau, and Sartre, as well as texts from Africa, the Caribbean, and contemporary France. Throughout the course, students will also engage in an autobiographical project of their own. Prerequisite: French $240-l e v e l$ or equivalent. 6 credits, $A L$; LA, IS, Winter-C. Yandell
132. Integrative Exercise During their senior year students will expand and deepen an essay in French from one of their advanced courses in the major. Normally, but not always, the director for this project will be the professor from that course. This essay may be completed during any term, but must be finished early in the Spring term, when an oral presentation (in English) of the work will be presented. 3

## FRENCH AND FRANCOPHONE STUDIES CONCENTRATION

Director: Professor Dana Strand

The French and Francophone Studies Concentration unites a diversity of disciplinary approaches to France while extending the notion of French and Francophone Studies beyond the specific territorial and linguistic boundaries of France and Parisian French. Relying on a solid language training, courses offered in French literature of France, Francophone literature of Africa and the Caribbean, film studies, social, political and art history, and economics, will afford a synthetic view of the evolution and impact of French cultural institutions. The majors most organically connected with French Studies are French, history, anthropology, art history, and political science, although students majoring in other disciplines may also concentrate in French and Francophone Studies.

## Requirements for the Concentration

Language Requirement: French 204 or equivalent

## Two Supporting Courses:

FREN 243 Topics in Cultural Studies: Cultural Reading
FREN 249/349 French Studies Seminar in Paris: European Identities: Paris and Geneva
FREN 250 Mali Program: Film and Society in Mali (Not offered in 2010-2011)
HIST 139 Foundations of Modern Europe (Not offered in 2010-2011)
HIST 232 Renaissance Worlds in France and Italy
HIST 237 The Enlightenment (Not offered in 2010-2011)
HIST 330 Gender, Ethics and Power in Medieval France (Not offered in 2010-2011)
LCST 245 Introduction to Critical Methods: Structure, Gender, Culture
Four Core Courses: Two from Group I, one from Groups II and III
Group I: French and Francophone Literature
FREN 240 Growing Up French
FREN 241 The Lyric and Other Seductions
FREN 243 Topics in Cultural Studies: Cultural Reading
FREN 245 Francophone Literature of Africa and the Caribbean (Not offered in 2010-2011)
FREN 249/349 Paris Program: European Identities: Paris and Geneva
FREN 351 Topics in Sixteenth Century Literature: Metamorphoses: Love, War and Monsters in Early Modern France (Not offered in 2010-2011)

FREN 352 The Court and Its Dissenters (Not offered in 2010-2011)
FREN 360 Topics in French Studies: Algeria-France (Not offered in 2010-2011)
Group II History and Art History
FREN 246 French Studies Seminar in Paris: City of Wonders: Paris in the Arts
FREN 251 Mali Program: Negotiating the Past: The Challenges of Nation-building in Mali (Not offered in 2010-2011)

HIST 137 Before Europe: The Early Medieval World 250c-1050 (Not offered in 2010-2011)
HIST 139 Foundations of Modern Europe* (Not offered in 2010-2011)
HIST 141 Europe in the Twentieth Century (Not offered in 2010-2011)
HIST 232 Renaissance Worlds in France and Italy
HIST 236 Women's Lives in Pre-Modern Europe (Not offered in 2010-2011)
HIST 237 The Enlightenment* (Not offered in 2010-2011)
HIST 243 The Peasants are Revolting! Society and Politics in the Making of Modern France (Not offered in 2010-2011)

HIST 330 Gender, Ethics and Power in Medieval France* (Not offered in 2010-2011)
*This course qualifies for Group II if not taken to fulfill the supporting course requirement.
Group III: Social Sciences: Anthropology, Economics, Political Science
ECON 233 European Economic History
FREN 233 The French Cinema (Not offered in 2010-2011)
CAMS 217 Border Crossings: Postmodern Perspective on French and German Cinema
POSC 251 Modern Political Philosophy (Not offered in 2010-2011)
POSC 352 Political Theory of Alexis de Tocqueville (Not offered in 2010-2011)
SOAN 256 Ethnography of Africa (Not offered in 2010-2011)
Senior Seminar: FREN 395 Cultures of Autobiography
For courses other than those in the French department, students will be expected to do source reading in French, but papers and exams will be written in English. Check with the director for other on or off-campus courses that may count for the concentration.

## GEOLOGY (GEOL)

Chair: Associate Professor Bereket Haileab
Professors: Clinton A. Cowan, Cameron Davidson, Mary E. Savina
Associate Professor: Bereket Haileab
Assistant Professor: Sarah J. Titus
Visiting Instructor: Isaac Larsen
Students who discover in themselves a sense of excitement about the environment, mountains, climate change, volcanoes, fossils, rivers and earthquakes, will find a good home in the Carleton Geology Department. Founded by Dr. Laurence M. Gould, former President of the College and one of the first geologists to explore Antarctica, the geology department retains a spirit of exploration and adventure. Fieldwork in the out of doors is central to our curriculum. The interests and goals of geology students are diverse; more than three-fourths go to graduate school as preparation for careers in academia, environmental sciences, science journalism, industry, and the public sector at the local through federal levels. A degree in Geology has also proved to be a good foundation for graduate study and work in conservation, architecture, engineering, resource economics, environmental education, and resource management. Typical of Carleton, our graduates can also be found in almost any profession.

The geology curriculum is flexible, rigorous, and rooted in the traditions of a liberal arts education. Junior and senior majors in other natural sciences are welcome to enroll in geology courses numbered 200 and above without the introductory geology prerequisite with permission of the instructor.

## Requirements for a Major

In addition to any introductory geology course that includes a laboratory section, students must take 36 credits from the 200- and 300 -level Geology course offerings. The requirement for introductory geology may be waived for juniors who come to geology from another science major. Six credits toward the major can be counted from any single off-campus program where appropriate, with a maximum of twelve credits toward the major from all off-campus programs. Each student must complete six credits of Geology 400, Integrative Exercise and attend seminars associated with comps fall, winter and spring terms senior year (students planning to spend a term off-campus during senior year should attend the appropriate seminars during junior year). Each student must also complete six credits of Physics from courses numbered 131 and above; six credits of Chemistry from courses numbered 123 and above; and twelve credits of Mathematics from courses numbered 111 and above; Computer Science courses numbered 111 and above may count for six credits of the mathematics requirement. Geology students should take three or four 200-level courses before taking 300-level courses. Geology majors are
encouraged to participate in a recognized field camp and take part in summer research opportunities. These requirements for the geology major are considered to be minimal; students planning a career in geology or the earth sciences should take several additional courses in mathematics and other sciences as well as geology. Students interested in earth science education should discuss their plans with Ms. Savina because a number of specific courses must be taken for teacher certification.

## Geology Courses

100. Geology in the Field This course introduces fundamental principles of geology and geological reasoning through first-hand field work. Much class time will be spent outdoors at nearby sites of geological interest. Using field observations, descriptions, data-gathering, hypothesis-testing, and interpreting, supplemented by lab work and critical reading, students will piece together the most important elements of the long and complex geologic history of southern Minnesota. They will learn how geologists ask questions, evaluate information and construct arguments. In a civic engagement project, students will also explain their results to the public. The course includes several writing assignments. Two weekend field trips will be included. 6 credits, AI, WR1, QRE, Fall—M. Savina
101. Introduction to Geology An introduction to the study of earth systems, physical processes operating on the earth, and the history of the earth. Field trips, including an all-day trip, and laboratories included. Not open to students who have taken Geology 100 or 120.6 credits, MS; LS, Fall, Spring-B. Haileab, S. Titus
102. Introduction to Paleoclimate Studies This course is designed to introduce the study of paleoclimatology broadly, and is based on investigating local deposits that span a broad range of geologic time. We will perform research projects on topics of local interest, which may include: analyzing fossils in 450 million year old rock, scrutinizing reported Cretaceous dinosaur gizzard-stones, researching post-Ice Age climate change using cave or lake deposits, and using dendrochronology (tree rings) and seismic surveys to study disruption of the prairie-big woods landscape by European settlers. Participants should be prepared for outdoor laboratories under winter conditions and one Saturday field trip. 6 credits, MS; LS, Winter-C. Cowan
103. Introduction to Environmental Geology An introduction to geology emphasizing environmental health and humankind's use and abuse of soil, water, fuels, and other resources. Field trips and laboratories included. Not open to students who have taken Geology 100 or 110.6 credits, $M S$; $L S$, Spring-I. Larsen
104. Energy and the Environment This course focuses on the scientific evidence of climate change and how human behavior impacts the composition of the atmosphere through the burning of fossil fuels. We also explore the potential of reducing or eliminating carbon from the energy stream. Students work in groups to research and present the scientific, economic, political, legal, and/or social consequences/implications of 1) global warming, 2) our current energy system, and 3) alternative energy systems in three related case studies. Writing briefs, oral presentations and panel discussions are emphasized. Does not count toward the Geology major. 6 credits, MS, WR; NE, WR2, Not offered in 2010-2011
105. Geomorphology Study of the geological processes and factors which influence the origin and development of the surficial features of the earth. Laboratories and field trips included. Prerequisite: One introductory geology course (110 or 120), or consent of the instructor. 6 credits, MS; LS, QRE, Fall-I. Larsen
106. Tectonics This course focuses on understanding the plate tectonics paradigm and its application to all types of plate boundaries. We will explore the historical development of the paradigm, geophysical tools used for imaging the structure of the Earth and determining plate motions, and possible driving
mechanisms of this global system. Students will independently explore a particular tectonic plate in detail throughout the term. Laboratories included. Prerequisite: One introductory geology course. 6 credits, MS, WR; LS, WR2, Fall-S. Titus
107. Paleobiology Fossils: their anatomy and classification, evolution, and ecology. Special emphasis on the paleobiology of marine invertebrates. Field trips and laboratories included. Prerequisite: One introductory geology course (110, or 120, ENTS 110 or an introductory biology course), or consent of the instructor. 6 credits, MS; LS, Spring-C. Cowan
108. Mineralogy The study of the chemical and physical properties of minerals, their geologic occurrence and associations. Topics include crystallography, crystal chemistry, x-ray analysis, phase equilibria, classification, optical mineralogy, and environments of formation. Laboratories are included. Prerequisite: One introductory geology course (110 or 120), or Chemistry 123 or 128.6 credits, MS; LS, Winter-B. Haileab
109. Petrology An introduction to the fundamental physical, chemical and tectonic principles that are relevant to the formation of igneous and metamorphic rocks. Labs emphasize description and interpretation of the origin of rocks based on hand specimen and thin section study. Field trips and laboratories are included. Prerequisite: Geology 250. 6 credits, MS; LS, Spring-B. Haileab
110. Geology of Soils The study of soil formation, and physical and chemical properties of soils especially as related to geomorphology and land use. Laboratories and field trips will emphasize how to describe and interpret soils. Prerequisite: One introductory geology course (110 or 120). 6 credits, MS; LS, Not offered in 2010-2011
111. Geology in New Zealand: Plate Tectonic Evolution of New Zealand This course covers the overarching geology of New Zealand, and at various sites along the program route we will analyze field relationships and read the appropriate scientific literature (and discuss the geology with local experts) to piece together the tectonic evolution of New Zealand. Students will write a short paper that summarizes their understanding, focusing on how the sites visited on this program fit into the larger tectonic story. 4 credits, MS; NE, Not offered in 2010-2011
112. Geology in New Zealand: Geologic Mapping and Field Observations In this course, we will focus on learning and applying geological field skills. We will map structured areas, log stratigraphic sections, and generally hone our skills of observation on a variety of field problems. 4 credits, $M S$; $L S$, Not offered in 2010-2011
113. Geology in New Zealand: Modern Geological Processes as Analogues for the Rock Record We will study modern systems with a view to understanding the volcanic, sedimentary and geomorphologic history of New Zealand. These may include various sites throughout the program, such as volcanic systems-hot springs, modern marine-estuarine settings, and terraced fluvial-alluvial systems. 4 credits, MS; NE, Not offered in 2010-2011
114. Geology in New Zealand: New Zealand Cultural Studies This will include visits to cultural sites and museums, guest lectures, and an introductory lesson in Maori pronunciation. 2 credits, $S / C R / N C$, MS; NE, Not offered in 2010-2011
115. Geology in New Zealand: Research Project on New Zealand Geology Participants will work in small teams to develop and execute research projects related to various aspects of our investigations of New Zealand. 4 credits, ND; NE, Not offered in 2010-2011
116. Hydrology A seminar on major principles of ground and surface water hydrology and their application to contemporary hydrologic problems. The course will draw considerably on studentdirected investigation of critical areas of study in hydrology. Prerequisites: Geology 210 or junior/senior standing in one of the physical sciences. 6 credits, ND; LS, QRE, Winter-I. Larsen
117. Special Topics in Advanced Geology Intensive study of the original journal literature of a particular geologic province or subfield of geology, culminating in cooperative preparation of a professional field trip guide, review paper or major presentation. Prerequisite: Senior standing in Geology or permission of instructor 3 credits, MS; NE, Not offered in 2010-2011
118. Sedimentology and Stratigraphy This course is based on field examination of outcrops of Lower Paleozoic sedimentary rock. We will interpret the processes involved in the creation, movement, and deposition of these ancient sediments, and try to determine their paleoenvironments. Also of interest are the transformation of these sediments into rock and the analysis and correlation of strata. Weekly laboratories, one overnight trip, and one Saturday trip are required. Please note the late laboratory times for this course. Both paleobiology and geomorphology prepare students for work in sedimentology. This course is intended for upperclass Geology majors, and much of the work is done in teams. Prerequisite: Three 200 -level Geology courses. 6 credits, $M S$, WR; $L S$, WR2, Fall-C. Cowan
119. Structural Geology This course focuses on rock deformation at scales ranging from the collision of continents to the movement of individual atoms within crystals. We will examine structures that develop within different layers of the Earth's lithosphere and discuss how and why these structures form. Reading, discussion, and presentation of scientific literature is expected throughout the term as we focus on deformation and tectonics in a single region. Laboratories and one weekend field trip are included. Prerequisite: One introductory geology course, six credits of Physics numbered 131 and above is recommended. 6 credits, MS; LS, Winter-S. Titus
120. Geochemistry of Natural Waters The main goal of this course is to introduce and tie together the several diverse disciplines that must be brought to bear on hydrogeochemical problems today. This course will explore: principles of geochemistry, applications of chemical thermodynamics to geologic problems, mineral solubility, stability diagrams, chemical aspects of sedimentary rocks, geochemical tracers, radiogenic isotopes and principles of stable isotope fractionation. Laboratories included. Prerequisite: Chemistry 123 or instructor's consent. 6 credits, ND, WR; LS, WR2, QRE, Not offered in 2010-2011
121. Integrative Exercise Each senior geology major must take a total of six credits of Geology 400. One of the credits will be awarded in the spring term for the preparation and delivery of a formal talk and attendance at the talks or other seniors. The other five credits must be taken in the fall and/or winter terms. Credits can be divided between those two terms or all five credits may be taken in the same term. All seniors must attend the Geology 400 seminars which will meet weekly fall and winter term. Geology 400 is a continuing course, and the grade will not be awarded until the end of spring term. 6 credits, S/NC, ND; NE, Fall, Winter, Spring—Staff

## GERMAN (GERM)

Chair: Professor John Roger Paas<br>Professors: Sigrun D. Leonhard, John Roger Paas, Anne C. Ulmer<br>Visiting Assistant Professor: Kai Herklotz

In our changing global environment, communication is the key to understanding other peoples and cultures. Our goal in German is to provide students with the proficiency needed to read German works in the original and/or to live and study in a German-speaking country. Since the fall of the Wall and the establishment of the European Union as an economic and political power, the question of German identity has again come to the forefront, and German philosophical and literary foundations are crucial to an understanding of the country and to the role it plays in the world. Our upper-level courses introduce students to important writers and thinkers such as Goethe, Schiller, Kafka, Brecht, and Rilke as well as to the German cinema and past and current cultural trends.

Language Courses: Language courses 101, 102, 103, and 204 are a sequential series of courses designed to prepare the student in the basic language skills (listening, speaking, reading, and writing) through the study of grammar, literature, and culture, and to provide the foundation for pursuing advanced work in language and literature. German 205 (taught overseas) and 207 are designed to develop the student's spoken and written mastery of the language through compositions and intensive oral work based on cultural and literary topics. Admission to these courses is determined either by appropriate CEEB or placement test scores, or by successful completion of the previous course in the sequence.

Literature/Cultural Courses: We examine a wide range of works for both their aesthetic and human values. Our literature courses have a number of goals: to refine and expand students' linguistic ability, to give students access to some of the greatest works of literature, to broaden their cultural understanding, to improve their ability to engage in critical analysis, and to help them better understand themselves and the human condition. In class discussions attention is focused on universal themes and concerns within the broad context of German culture. In all courses numbered 250 and above the readings and discussions will be in German. The prerequisite for these courses is German 204 or the permission of the instructor.

## Requirements for a Major

Sixty-six credits including one language class (German 205 or 207); Literary and Cultural Studies 245 (best taken during the junior year); normally German 231; three literature/culture courses in German; and the integrative exercise. Courses 101, 102, 103, 204 and 210 do not count toward the major. In addition at least six credits are required in literature other than German, read in the original language or in translation. Majors are encouraged to take other related courses in fields such as history, philosophy, religion, classics, and art or music history, in order to gain further perspectives in their literary studies. A special major involving German literature and another discipline may sometimes be arranged upon consultation with the department.

Programs Abroad: Participation in Carleton German Programs or in another approved foreign study program is highly recommended for students majoring in German. Students interested in a program aboard that is not affiliated with Carleton should consult with a faculty member in German and with the Director of Off-Campus Studies.

Language Houses: Students have the opportunity to immerse themselves in the language by living in the Language House where they can organize and participate in numerous cultural activities. Each year a language associate from Germany resides in the house.

Certificate of Advanced Study in Foreign Language and Literature: In order to receive the Certificate of Advanced Study in German students must satisfactorily complete the following: 36 credits beyond 103, of which at least twenty-four will be taught in the target language; 18 of these credits may be obtained in advanced language courses (German 205, 207 or 210). The remaining courses may be from the German section or from a list of approved courses offered by other departments (philosophy, history, linguistics, music, etc.) Although courses for the certificate may be taken on a S/CR/NC basis, "CR" level work will not be sufficient to satisfy course requirements. No more than twelve credits from non-Carleton off-campus studies programs may be applied toward the certificate.

## German Courses

100. The Face in the Mirror: Searching for the Self Many writers have used fiction as a means of coming to terms with themselves and their identities at various points in their lives. This has been particularly true throughout this century in German-speaking countries, largely because of the impact of the two world wars. We will read (in translation) a number of twentieth century works by German, Swiss and Austrian writers, focusing on the quest for self-awareness. We will include such authors as

Franz Kafka, Hermann Hesse, Max Frisch, Barbara Frischmuth, Günther Grass and Christa Wolf, among others. Reading and discussion in English. 6 credits, AI, WR1, Fall-A. Ulmer
101. Elementary German This course stresses a firm understanding of the basic structural patterns of the German language through reading, writing, speaking, and listening drills. For students with no previous knowledge of German or for those whose test scores indicate that this is the appropriate level of placement. 6 credits, ND; NE, Fall—Staff
102. Elementary German Further study of the basic structural patterns of the German language. Prerequisite: German 101, or appropriate placement score. 6 credits, ND; NE, Winter-Staff
103. Intermediate German Completion of the study of basic structural patterns of the German language, and the reading and discussion of a longer literary work. Prerequisite: German 102.6 credits, ND; NE, Spring-Staff
204. Intermediate German Critical reading and discussion of selected German plays, short stories and/or films. Prerequisite: German 103 or appropriate placement score. 6 credits, ND; NE, Fall—Staff
205. Berlin Program: Intermediate Composition and Conversation This course, taught by a native speaker, will focus on students' reading, writing, and speaking abilities. The class format will feature mainly discussions with grammar exercises interspersed as needed. Students will write frequent papers and correct these papers themselves. 6 credits, $N D$; $N E$, Not offered in 2010-2011
207. Young Adult Literature The best current German-language literature for teen-aged readers treats serious topics with wit and sensitivity. These texts, many of which have won prizes, are linguistically accessible and written with flair. Readings and class discussions will be in German. Prerequisite: German 204 or the equivalent. 6 credits, ND; LA, Not offered in 2010-2011
210. Coffee and the News This course is intended as a refresher course for students who have completed the basic language sequence and/or taken part in the German program. Practice in writing and speaking German. Prerequisite: German 204 or the equivalent. 2 credits, S/CR/NC, ND; NE, IS, Fall, Winter, Spring-K. Herklotz
216. Studies in German Cinema: Current Issues in Contemporary Film This course will be an introduction to Austrian and German film from the 1970s to the present. We will watch one or two films a week, and focus class discussions on such issues as the Third Reich and its impact on contemporary Germany (Fassbinder, Syberberg, Sanders-Brahms), the American dream in German culture (Wenders, Herzog), minorities in Germany (Fassbinder, Ottinger), literature into film (Schlöndorff), the role of women (Fassbinder, Sanders-Brahms, Ottinger, Dörrie) and other topics. We will discuss different genres, the notion of auteur cinema, and film in its double role of reflection and co-creator of ideology. 6 credits, AL; LA, Not offered in 2010-2011
219. German Film after World War II This course introduces postwar German cinema, emphasizing films in their socio-historical contexts while also providing an introduction to theoretical approaches and analytical tools for film analysis. Topics include: Remembering the Holocaust and WWII; terrorism; socialism and utopia; Berlin films and reunification; as well as race and migration. We will discuss a wide range of genres and styles, from New German Cinema to Turkish German comedy, from documentary to socialist musical. We will watch one or two films per week, accompanied by readings on specific films, German film history, and film analysis. All readings and class discussion in English. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
230. From Gutenberg to Gates: The History and Practice of Printing Gutenberg's invention of printing with movable type has had a far-reaching impact on the political, social, and intellectual development in the Western World. A similarly profound revolution is taking place today with the use of computers. This course focuses on the major developments in printing since 1450 against the relevant
historical and social background. In addition to lectures and discussions there is a weekly "lab," in which students will gain first-hand knowledge of such techniques as woodcutting, engraving, etching, lithography, bookbinding, and papermaking. In English translation. 6 credits, S/CR/NC, AL; HI, Not offered in 2010-2011
231. Damsels, Dwarfs, and Dragons: Medieval German Literature Around the year 1200 German poets wrote some of the most lasting works in the Western literary tradition. It was a time of courtly love and Arthurian romances, and themes vary widely from love and honor to revenge and murder. Special attention is given to the poetry of Walther von der Vogelweide and two major epics: The Nibelungenlied and Gottfried von Strassburg's Tristan and Isolde. In English translation. 6 credits, AL; HI, Winter-R. Paas
240. German Nobel Laureates Since its inception in 1901 the Nobel Prize in Literature has been awarded numerous times to German authors. This course will introduce students to the shorter prose works of several of these Nobel Laureates, including Günter Grass, Heinrich Böll, Hermann Hesse, and Nelly Sachs. All readings and discussions in English. 6 credits, AL; LA, IS, Offered in alternate years, Not offered in 2010-2011
244. Berlin Program: Theater in Berlin This course will be structured around the theater productions of the fall 2009 season in Berlin. (A few films will be included). The class will read six to eight plays from different literary and historical periods, study their historical and literary context, and also see them performed in the theater. 6 credits, AL; LA, IS, Not offered in 2010-2011
246. Rebels, Revolutionaries, and Misfits This course focuses on several German literary figures from the nineteenth and twentieth centuries who either were outsiders during their lifetimes or who actively fought against the establishment. The authors to be studied include Franz Kafka, Thomas Mann, Bertolt Brecht, Heinrich von Kleist, and Georg Büchner. In English translation. 6 credits, AL; LA, Not offered in 2010-2011
247. Fairy Tales, Myths, and Legends From bedtime stories to Disney films to video games, narratives familiar to us as fairy tales, myths and legends are ever present. This course examines tales in multiple forms, including versions of oral tales, literary tales, feature and animated film, and popular culture manifestations. While the course has a special emphasis on the German tradition, we will also examine many stories (in all their forms) in traditions that have been in dialogue with European traditions, including the Arabian Nights, Disney films, and anime. In several cases we will also read contemporary literary rewritings of familiar tales. All readings and class discussion in English. 6 credits, AL; HI, Not offered in 2010-2011
249. Tense Affinities: A History of German Jewish Culture The tragedy of the Holocaust in the twentieth century often has overshadowed the long and lively history of German Jewish culture. This course will trace the historical developments of a diverse and complex German Jewish culture and the multiple ways in which it is intertwined with European and German mainstream culture from the Middle Ages to its revival in post-unification Germany. The readings include overviews of historical periods; the literary, political, and philosophical texts by major German Jewish authors; autobiographies; painting; graphic novels; and film. Conducted in English; with German material available upon request. 6 credits, HU, WR; HI, WR2, IS, Spring-K. Herklotz
295. Berlin: The German Metropolis Today Berlin is at the center of unified Germany and an evermore-united Europe. This course will trace the significance of Berlin for both Germany and Europe, taking a historical as well as comparative approach. Representations of Berlin in theoretical essays, literature, art and film, as well as Berlin as site of history, will provide the starting point from which we will explore many facets of twentieth century modernity, German-Jewish history, the Cold War, and the New Europe. Readings and discussions are in German. Prerequisite: German 204 or equivalent. 6 credits, AL; HI, IS, Not offered in 2010-2011
312. Rilke and His Circle Rainer Maria Rilke, perhaps the foremost poet of his century, lived among a variety of artists, thinkers, and writers. Among them are Rodin, Lou Andreas-Salome, and the Worpswede group of artists. We will follow the threads of Rilke's life and poetry, and see where they lead us. The course will center on Rilke's poetry and prose fiction, but will also include correspondence, and the works of some of Rilke's associates. Class discussions and primary readings will be in German (sometimes with English translations provided); some secondary readings may be in English. Prerequisites: German 204 or equivalent. 6 credits, AL; LA, Winter-A. Ulmer
345. Vienna: Dream and Reality The course will examine the beginnings of Modernism in Austrian culture, music, theater, philosophy, art and architecture, focusing on literature within its wider context. We will look at such thinkers and artists as Freud, Wittgenstein, Schnitzler, Hofmannsthal, Hermann Bahr, Karl Kraus, Robert Musil and Peter Altenberg; as well as the great musicians, architects and painters of the time. We will survey the history and culture of the period between 1870 and 1930, with our primary focus on the period from around 1890-1920. Lectures and discussions will be in German. Prerequisite: German 204 or the equivalent. 6 credits, AL; HI, IS, Not offered in 2010-2011
346. Viennese Culture on Site The first part of the course consists of a field trip to Vienna, Austria. We will spend two weeks going to museums and seeing the architecture and art we have discussed in German 345, including many works by such artists as Loos, Klimt, Schele and Kokoschka. The course will conlcude on campus when students will give oral presentations on topics selected in the fall term and investigated during the winter break trip. Prerequisite: German 345.6 credits, $A L, W R ; H I, W R 2, I S$, Not offered in 2010-2011
351. The Age of Goethe The literary movements of Enlightenment, Storm and Stress, and Classicism as seen through selected works of Goethe, Schiller, Lessing and Herder. Prerequisite: German 204 or the equivalent. 6 credits, AL; LA, Not offered in 2010-2011
355. Topics in German Drama: Twentieth Century Theatrical Experiments We will read and discuss in German a range of plays which push the limits of theatrical possibilities. Possible playwrights include Georg Kaiser, Bert Brecht, Wolfgang Borchert, Rolf Hochhuth, Peter Handke, Heiner Müller, Thomas Bernhard, and perhaps a twenty-first century writer. Videos of play productions and our own dramatic readings of scenes will help us explore some of the century's theories of acting and staging. Prerequisite: German 204 or the equivalent. 6 credits, AL; LA, Not offered in 2010-2011
400. Integrative Exercise Examining an aspect of German literature across eras or genres. 6 credits, S/NC, ND; NE, Fall, Winter-Staff

## HEBREW

See Middle Eastern Languages.

## HISTORY (HIST)

Chair: Professor Anna Rachel Igra
Professors: Clifford E. Clark, Jr., Anna Rachel Igra, Adeeb Khalid, Harry McKinley Williams
Associate Professors: Andrew B. Fisher, Victoria Morse, William North, Susannah R. Ottaway, Seungjoo Yoon, Serena R. Zabin

Assistant Professors: David G. Tompkins, George H. Vrtis, John C. (Thabiti) Willis
Mellon Post-Doctoral Fellow: Brendan LaRocque
The objectives of the History major have both a general educational aspect and an aspect that is more narrowly professional. On one level, work in the major develops skills of research, analysis, and expression; on another level, it introduces the student to some of the major civilizations that human
beings have created during the past three thousand years; on still another level, majoring in History confronts students with specific problems of interpreting the past--the conflict of opinions among historians and the difficulties of reconstructing past societies from their sources.

In view of the variety of departmental offerings, no specific combination of courses can be considered the ideal program. If you choose History as a major you have, in effect, to design your own mix of courses to meet these objectives. The department offers a few guidelines, even fewer requirements, and the services of a departmental advisor. Still, most of the choice is up to you; it should reflect your particular interests and abilities, and perhaps also your career plans.

See History Department Web site.

## Requirements for a Major

A total of 72 credits from courses taken in the history department. History 100's and 110's and the comprehensive exercise count toward the total number of credits. Certain courses offered outside the history department may count toward the major; consult the department chair for specific information. Courses in ancient history are also taught in the Classics department and count toward the History major.

## Primary Field

Courses must be taken in at least three of the following seven fields: 1) United States, 2) Ancient and Medieval, 3) Early Modern and Modern Europe, 4) the Middle East and Asia, 5) Africa and Its Diaspora, 6) Latin America, and 7) the Atlantic World. Students choosing fields 1-4 as their primary field will take four courses; those choosing 5-7 may take four courses in that field, or take three courses in the field and one additional course that is of relevance to the field. This additional course will be chosen in consultation with the adviser.

## Self-designed Thematic Field Option

In consultation with the faculty, students may also propose a self-designed thematic field as their primary field (e.g., Gender and History, Colonialism). Interested students should consult the department for further details and procedures.

## Additional Requirements

In addition to four courses in a primary field, all majors must also take at least two courses in each of two secondary fields. The History major must complete a research seminar (History 395) normally in the primary field, the History Colloquium (History 298) and Advanced Historical Writing (History 398) in the winter term of the senior year. Students prepare for the senior integrative exercise by submitting an acceptable proposal (History 397), normally in fall term of the senior year and writing a thesis (History 400), normally in the winter term of the senior year. See History Comps Web page.

It is recommended that students planning to major in history take a History 100 seminar and one or two other courses during their first year. History majors who are interested in study and research in a major library should consider the Newberry Library Seminar program. Other interesting off-campus programs and graduate studies programs and information can be found in the history department lobby and at the following sites: History Department Resources page or Off-Campus Studies Office.

## Courses from other departments

(may be included in the seventy-two credits total).
AMST 115 Introduction to American Studies
CLAS 227 Greek History: The Greek World From the Rise of the City-State to the Rise of the Hellenistic Kingdoms

CLAS 228 Roman History, Republic and Principate(Not offered in 2010-2011)
CLAS 229 The Later Roman Empire, Byzantium and Islam
ECON 232 American Economic History: A Cliometric Approach (Not offered in 2010-2011)
ECON 233 European Economic History

RELG 140 Religion and American Culture (Not offered in 2010-2011)
Please ask the history department chair or your adviser about any courses in African/African American Studies, American Studies, Asian Studies, Classics, Economics, Environmental and Technology Studies, Latin American Studies, Religion, Women's and Gender Studies, or other special courses offered by an historian in another department if you wish to have these courses to apply toward the history major.

## History Courses

Courses numbered below 200 are open to first year students. First year students may register in courses numbered 200 and above with a signed permission slip from the instructor.
100. Black Slaves, White Masters: Historians and Slavery This seminar explores the place of slavery in American historiography in the half-century following U.B. Phillips's American Negro Slavery (1918). It probes the complexities of the master-slave relationship as well as integrates the methods and skills of the historian regarding questions of culture, gender, economics, and resistance. 6 credits, $A I$, WR1, Fall-H. Williams
100. Drunks and Teetotalers: Alcohol and American Society From its earliest days as a nation, the use and abuse of alcohol in the United States has been hotly debated. This course will examine historians' attempts to understand alcohol's powerful impact on American politics, society, and social reform. Using original source materials from the times, this course will focus on colonial rebellions, the temperance movement, immigration and the rise of saloons and saloon politics, the debate over prohibition, and the contemporary reforms of Alcoholics Anonymous, and MADD (Mothers Against Drunk Drivers). 6 credits, AI, WR1, Fall-C. Clark
100. Conquest and Survival in Indigenous Mexico The sixteenth century Spanish conquest of the native "empires" of Mexico and its long-term consequences. How disruptive was the conquest for indigenous societies? Did the downfall of indigenous empires and city-states signal the demise of indigenous culture? We will examine and discuss the views of the combatants themselves and later interpretations of historians. 6 credits, AI, WR1, IS, Fall-A. Fisher
100. The Gold Rush West The great western gold rushes are among the most iconic episodes in nineteenth-century American history. It takes little effort to place the name John Sutter or to find an abandoned mining camp west of the Great Plains. Behind such symbols, though, lay the transforming effects of remarkable mass migrations, of pivotal confrontations with Native peoples, of new ways of perceiving and using land, and of dynamic cultural, political and environmental forces that combined to remake the West and the nation as a whole. This seminar will examine these developments from the California experience to the Klondike. 6 credits, AI, WR1, IDS, Fall-G. Vrtis
100. Trials in Early America Women and men of all races, ethnicities, and classes passed through the courts of early America. This course will be based primarily on trial transcripts and other court papers from seventeenth- and eighteenth-century America. We will use these documents as windows onto the contemporary legal, cultural, and social issues that these trials contested. Using secondary sources, the seminar will then put these issues into the larger contexts of contact, conflict and assimilation in Dutch, Spanish and British America. 6 credits, AI, WR1, Fall—S. Zabin
100. Mapping the World This course will explore the history of maps in medieval and early modern Europe. After an introduction to maps as rhetorical documents, we will examine the functions and forms of medieval European and Islamic cartography. We will then look closely at the continuities and transformations in map-making during the period of the European voyages. The focus of the course will be on understanding what purposes each map served within its own cultural context and how its visual form relates to that purpose. We will work closely with the facsimile maps in Gould Library Special Collections. 6 credits, AI, WR1, Fall-V. Morse
120. Rethinking the American Experience: American Social History, 1607-1865 A survey of the American experience from before Christopher Columbus' arrival through the Civil War. Some of the topics we will cover include: contact between Native and European cultures; the development of the thirteen mainland British colonies; British, French, and Spanish imperial conflicts over the Americas; slavery; the American Revolution; religious awakenings; antebellum politics; and the Civil War. 6 credits, HU, HI, Fall-C. Clark
121. Rethinking the American Experience: American Social History, 1865-1945 This course offers a survey of the American experience from the end of the Civil War through World War II. Although we will cover a large number of major historical developments--including Reconstruction, the Progressive movement, World War I, the Great Depression, the New Deal and World War II--the course will seek to emphasize the various beliefs, values, and understanding that informed Americans' choices throughout these periods. In countless ways, the legacy of their lives continues to shape ours today, and so we will seek to understand the connections (and sometimes the disconnections) between Americans past and present. 6 credits, HU; HI, Spring-G. Vrtis
130. The Formation of Christian Thought This course surveys the development of Christian thought in the Latin West and Greek East from the first to the fifth centuries, the period when many of the authoritative intellectual traditions of both medieval Europe and Byzantium were created. Among the themes/problems to be explored: the contribution of late ancient philosophy to Christian thought; Christian attitudes towards non-Christian belief and culture (pagan and Jewish); the interpretation of the Bible; the development of heresy and orthodoxy; and the relationship between theology, asceticism, and the development of the church as an institution. 6 credits, HU, WR; HI, WR2, Not offered in 2010-2011
137. Before Europe: The Early Medieval World, 250-c. 1050 This course examines the formation of western Christendom from its origins in the Christian Roman Empire to its consolidation in the eleventh century. As we move from Merovingian Gaul, Lombard Italy, and Anglo-Saxon England to the Carolingian Empire and its successor kingdoms in Germany, France, and Italy, we will examine such issues as the cultural and political legacy of the Roman and Carolingian worlds; the nature and forms of secular and sacred power; gender roles and relations; ethnic and social identity; and the forms, patterns and meaning of communication (political, economic, ritual, literary, religious) both inside and outside early medieval Europe. 6 credits, HU; HI, IS, Not offered in 2010-2011
138. The Making of Europe What are the origins of what we call "Europe?" How did this corner of the Eurasian continent come to play a predominant role in world history? What forces worked to create or to undermine a recognizably "European" culture? While cultural developments and new institutions offered powerful sources of shared experience and practice, national states and self-conscious localisms introduced new lines of fragmentation. Through lectures and discussion of a wide variety of primary sources from the period this class will examine these competing tendencies as they shaped the history of Europe's peoples during the later Middle Ages and the early Renaissance. 6 credits, $H U, W R ; H I, W R 2$, IS, Winter-V. Morse
139. Foundations of Modern Europe A narrative and survey of the early modern period (fifteenth through eighteenth centuries). The course examines the Renaissance, Reformation, Contact with the Americas, the Scientific Revolution and Enlightenment. We compare the development of states and societies across Western Europe, with particularly close examination of the history of Spain. 6 credits, HU; HI, IS, Not offered in 2010-2011
140. Modern Europe 1789-1914 An introduction in the age of political and social revolutions. Emphasis is given to the impact of industrialization, the rise of national consciousness, and the search for progress through the great liberal and socialist movements, and ultimately the drive for global domination and development, students are invited but not required to take HIST 141 as a follow-up to this course. 6 credits, HU; HI, IS, Spring-D. Tompkins
141. Europe in the Twentieth Century A survey of the major political, socio-economic, and intellectual developments of twentieth century Europe. Special emphasis will be placed on the rise of urban masses and private economic power and the attempts to integrate these new forces into a stable political system. 6 credits, HU; HI, IS, Not offered in 2010-2011
151. History of Modern Japan This course explores the modern transformation of Japanese society, politics, economy, and culture from the Meiji Restoration of 1868 to the present. It is designed to provide students with an opportunity to explore basic issues and problems relating to modern Japanese history and international relations. Topics include the intellectual crisis of the late Tokugawa period, the Meiji Constitution, the development of an imperial democracy, class and gender, the rise of Japanese fascism, the Pacific War, and postwar developments. 6 credits, HU; HI, IS, Not offered in 2010-2011
152. History of Imperial China An introduction to the history of China from its beginnings to the end of the last dynasty in 1911, providing an overview of traditional Chinese thought, culture, institutions, and society. Students examine the development of philosophy and religion, achievements in art and literature, and social and economic change. This course also considers foreign conquest dynasties, Chinese expansion into Inner Asia, and China's relations with the West. 6 credits, HU, RAD; HI, IS, Winter-S. Yoon
153. History of Modern China This course, a continuation of History 152 (History of Imperial China), offers a critical survey of the modern transformation of politics, economy, society, and culture in Chinese history from the eighteenth century to the present. Topics include neo-Confucianism, the bureaucracy, the repudiation of civil society, the interaction with the West, peasant rebellions, nationalism, party politics, the dynamics of Communist rule, and alternative Chinese societies both inside and outside Mainland China. 6 credits, HU, RAD; HI, IS, Spring-S. Yoon
160. History of Classical India This course will look at classical Indian civilization by examining the interconnectedness of its political and social institutions, religions, and material life. We begin with the Indus Valley civilization ( 2500 BC ) and end with the Turkish Sultanate in Northern India ( 1525 AD ). Ancient India has recently become the object of intense political debate; we will consider the implications of current debates and the challenges and methods of reconstructing India's history. 6 credits, HU; HI, IS, Not offered in 2010-2011
161. History of Modern India A survey of the modern history of the Indian sub-continent from the establishment of the Mughal Court in North India ( 1525 AD ) to the present including the Indian Ocean trade, the Southern independent kingdoms, British colonial rule, nationalism and post-colonial South Asia. Students will be asked to consider the differences between the early modern, colonial, and national states and empires on the subcontinent. 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
167. History of Modern South Asia This course examines the history of South Asia from the beginning of the early modern era to the present. We will explore forms of government, types of economies, and art and culture, and examine the role of religions in South Asian societies, including Islam, Hinduism, and Buddhism. We will pay special attention to the decline of early modern indigenous empires, the expansion of European colonialism, and the development of nationalism. Topics including the role of political violence and non-violence, conceptions of masculinity and feminity, caste, class, and race will also form part of our material. 6 credits, HU; HI, IS, Fall-B. LaRocque
169. Colonial Latin America 1492-1810 How did peoples from the Americas, the Iberian Peninsula, and Africa contribute to the creation of new colonial societies in Latin America and the Caribbean? The course examines the bewildering spectrum of indigenous societies Europeans and Africans encountered in the Americas, then turns to the introduction and proliferation of Hispanic institutions and culture, the development of mature colonial societies, and the increasing tensions and internal contradictions that plagued the region by the late eighteenth century. It asks how the colonized population managed to survive, adapt, and resist imperial pressures and examines the creation of new collective identities. 6
credits, HU, RAD; HI, IS, Not offered in 2010-2011
170. Modern Latin America 1810-Present This course focuses on the legacy of colonial rule and asks how nascent nation-states dealt with new challenges of political legitimacy, economic development, and the rights of citizens. Case studies from the experiences of individual nations will highlight concerns still pertinent today: the ongoing struggle to extend meaningful political participation and the benefits of economic growth to the majority of the region's inhabitants, popular struggles for political, economic, and cultural rights, and the emergence of a civic society. 6 credits, HU, RAD; HI, IS, Winter-A. Fisher
180. An Historical Survey of East Africa This course will survey the history of Eastern Africa from 1000 BC to the present. Topics to be covered include the development of settled communities and states; the economic and cultural networks that have linked the Indian Ocean with the interior; the East African slave trade; comparative colonialism; anti-colonial resistance; African nationalism; and post-colonial developments. We will cover the region that today comprises the countries of Tanzania, Kenya, and Uganda. 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
181. West Africa in the Era of the Slave Trade The medieval Islamic and the European (or Atlantic) slave trades have had a tremendous influence on the history of Africa and the African Diaspora. This course offers an introduction to the history of West African peoples via their involvement in both of these trades from the fifteenth to the nineteenth century. More specifically, students will explore the demography, the economics, the social structure, and the ideologies of slavery. They also will learn the repercussions of these trades for men's and women's lives, for the expansion of coastal and hinterland kingdoms, and for the development of religious practices and networks. 6 credits, $H U, R A D ; H I, I S$, Offered in alternate years, Fall—J. Willis
182. A Survey of Southern African History This course will review the history of southern Africa from the Late Neolithic period to the twentieth century. The development of a multiracial society; the impact of the mineral/industrial revolution in the nineteenth century; and the growth of African resistance and nationalism up to the present will be the focal points. 6 credits, HU; HI, IS, Not offered in 2010-2011
183. History of Early West Africa This course surveys the history of West Africa during the precolonial period from 790 to 1590 . It chronicles the rise and fall of the kingdoms of Ancient Ghana, Mali, and Songhai. We will examine the transition from decentralized to centralized societies, the relations between nomadic and settler groups, the institution of divine kingship, the emergence of new ruling dynasties, the consolidation of trade networks, and the development of the classical Islamic world. Students will learn how scholars have used archeological evidence, African oral traditions, and the writings of Muslim travelers to reconstruct this important era of West African history. 6 credits, $H U$, RAD; HI, IS, Offered in alternate years, Winter-T. Willis
184. Colonial West Africa This course surveys the history of West Africa during the colonial period, 1860-1960. It offers an introduction to the roles that Islam and Christianity played in establishing and maintaining colonial rule. It looks at the role of colonialism in shaping African ethnic identities and introducing new gender roles. In addition, we will examine the transition from slave labor to wage labor, and its role in exacerbating gender, generation, and class divisions among West Africans. The course also highlights some of the ritual traditions and cultural movements that flourished in response to colonial rule. 6 credits, HU, RAD; HI, IS, Offered in alternate years, Spring—T. Willis
195. American Environmental History This course examines the changing relationship between humankind and the natural world in the portion of North America that is now the United States. We will begin with a consideration of Native American substinence strategies and ideas about nature, and then turn to the arrival of Europeans, colonialism, industrialization, increasing urbanization, and the conservation and environmental movements, among other major eco-historical developments. As we explore these developments, we will focus on the deeper ecological implications of human activities,
cultural patterns and intellectual currents. One goal of the course will be to provide an historical context for understanding contemporary environmental issues. 6 credits, HU; HI, IDS, Spring-G. Vrtis
200. The Zen of Asian and Western Woodworking This course will contrast traditional Chinese and Japanese philosophies of woodworking to those used in England and the United States through readings, museum visits, and hands-on projects in the woodshop. The focus will be on the history of the design and construction of furniture using traditional hand tools. Particular attention will be paid to the impact of Ming Dynasty furniture design on the furniture constructed in colonial America. We will also explore some of the complexities of cultural borrowing and cultural difference. Students will be responsible both for writing essays and for completing several small projects made out of wood. 6 credits, HU ; HI, Not offered in 2010-2011
204. Crusade, Contact and Exchange in the Medieval Mediterranean The theory that the focus of affairs in Europe turned northwards after the Muslim conquests of North Africa and Spain has been highly influential in shaping courses on medieval Europe. More recently, however, attention has focused on the rich culture of contact among the peoples of the Mediterranean throughout the medieval period. Through lectures and critical discussion of primary sources, this course will explore the many faces of this contact, including trade, warfare, political ties, missions, and artistic and intellectual influences. Our primary focus will be on the Christian European experience, but we will also study Jewish, Muslim and Byzantine sources. 6 credits, HU, WR, RAD; HI, WR2, IS, Not offered in 2010-2011
208. The Atlantic World: Columbus to the Age of Revolutions, 1492-1792 In the late fifteenth century, the Atlantic ocean became a vast highway linking Spain, France, Britain, and the Netherlands to the Americas and Africa. This course will examine the lives of the men and women who inhabited this new world from the time of Columbus to the eighteenth-century revolutions in Haiti and North America. We will focus on the links between continents rather than the geographic segments. Topics will include the destruction and reconfiguration of indigenous societies; slavery and other forms of servitude; religion; war; and the construction of ideas of empire. Students considering a concentration in Atlantic History are particularly encouraged to enroll. Emphasis on primary sources. 6 credits, $H U, H I, I S$, Spring-S. Zabin
211. More than Pilgrims: Colonial British America An intensive exploration of particular topics in early American history in its context as part of an Atlantic world. Topics will include voluntary and involuntary migration from Europe and Africa, personal, political, and military relationships between Europeans and Native Americans, the pattern of colonial settlement and politics, concepts of family and community, strategies of cultural adaptation and resistance, slavery, religion, the making of racial, rank, and gender ideologies, and the development of British and American identities. 6 credits, $H U ; H I, I D S$, Winter-S. Zabin
212. The Era of the American Revolution This class will examine the American Revolution as both a process and a phenomenon. It will consider the relationship of the American Revolution to social, cultural, economic, political, and ideological change in the lives of Americans from the founding fathers to the disenfranchised, focusing on the period 1750-1800. The central question of the course is this: how revolutionary was the Revolution? 6 credits, HU; HI, Spring-S. Zabin
213. The Age of Jefferson This course will examine the social, political and cultural history of the period 1783-1830 with special consideration of the framing and ratification of the Constitution and the defining of the "United States." Historians contend that the period covered by this course is the key era of social transformation in American history. To assess this hypothesis, we will examine changes in race, gender, and class relations within the context of economic and geographical expansion and religious revitalization. We will explore paradoxes of American democracy and citizenship as they developed in the early Republic. Previous knowledge of American history will be assumed. 6 credits, HU; HI, Not offered in 2010-2011
217. From Ragtime to Football: U.S. History in the 1890s The 1890s were a period of turmoil. From the closing of the frontier west to the debates over imperialism, immigrants, ragtime music, and football, Americans tried to come to terms with the changing standards and social relationships of the modern world. Using original sources from the period, this course will explore the various debates over war, women's roles, sports, art, music, politics, and popular culture in the 1890s. 6 credits, $H U, W R ; H I$, WR2, Not offered in 2010-2011
220. African American History I This survey begins with the pre-enslavement history of African Americans in West Africa. It proceeds to the transition of the slave from an African to an African American either directly or indirectly through the institution of slavery until 1865. Special attention will be given to black female activists, organizations, and philosophies proposing solutions to the AfricanAmerican and Euro-American dilemma in the antebellum period. 6 credits, HU, RAD; HI, Not offered in 2010-2011
221. African American History II The transition from slavery to freedom; the post-Reconstruction erosion of civil rights and the ascendancy of Booker T. Washington; protest organizations and mass migration before and during World War I; the postwar resurgence of black nationalism; African Americans in the Great Depression and World War II; roots of the modern Civil Rights movement, and black female activism. 6 credits, HU, RAD; HI, Winter-H. Williams
222. U.S. Women's History to 1877 Gender, race, and class shaped women's participation in the arenas of work, family life, culture, and politics in the United States from the colonial period to the late nineteenth century. We will examine diverse women's experiences of colonization, industrialization, slavery and Reconstruction, religion, sexuality and reproduction, and social reform. Readings will include both primary and secondary sources, as well as historiographic articles outlining major frameworks and debates in the field of women's history. 6 credits, HU, RAD; HI, IDS, Fall-A. Igra
223. U.S. Women's History Since 1877 In the twentieth century women participated in the redefinition of politics and the state, sexuality and family life, and work and leisure as the United States became a modern, largely urban society. We will explore how the dimensions of race, class, ethnicity, and sexuality shaped diverse women's experiences of these historical changes. Topics will include: immigration, the expansion of the welfare system and the consumer economy, labor force segmentation and the world wars, and women's activism in civil rights, labor, peace and feminist movements. 6 credits, HU, RAD; HI, IDS, Winter-A. Igra
226. U.S. Consumer Culture In the period after 1880, the growth of a mass consumer society recast issues of identity, gender, race, class, family, and political life. We will explore the development of consumer culture through such topics as advertising and mass media, the body and sexuality, consumerist politics in the labor movement, and the response to the Americanization of consumption abroad. We will read contemporary critics such as Thorstein Veblen, as well as historians engaged in weighing the possibilities of abundance against the growth of corporate power. 6 credits, $\mathrm{HU} ; \mathrm{HI}$, Spring-A. Igra
227. The American West This course explores the history of a large and seemingly unruly swath of North America, the lands lying west of the Missouri River. For many people, the American West tends to conjure up familiar images: Indians riding hard after buffalo, wagon trains winding their way west along river valleys, bedraggled goldseekers, Custer's last stand along the Little Bighorn, cowboys and the open range, Populist stump-speakers, hardscrabble cities, towering mountains, majestic national parks, and many more. This course will examine these images--these iconic western stories--and the complex historical developments they both represent from pre-history through the twentieth century. 6 credits, HU; HI, IDS, Not offered in 2010-2011
228. American Indian History This course offers an introduction to the history of American Indian societies from prehistory to the end of the nineteenth century. It will focus on the major issues and
events that defined and shaped Indian peoples' lives, including their deep roots in North America, the dynamics of Indian-European encounters, the impact of Euro-American expansion, the process of removal, and the programs to "Americanize" Indian peoples. Throughout the course, we will examine how Indians struggled to retain a sense of their historic cultures and political autonomy, even as they confronted and adapted to the powerful forces unleashed by Euro-American society. 6 credits, $H U$, RAD; HI, IDS, Not offered in 2010-2011
229. Gender and Work in U.S. History Historically work has been a central location for the constitution of gender identities for both men and women; at the same time, cultural notions of gender have shaped the labor market. We will investigate the roles of race, class, and ethnicity in shaping multiple sexual divisions of labor and the ways in which terms such as skill, bread-winning and work itself were gendered. Topics will include domestic labor, slavery, industrialization, labor market segmentation, protective legislation, and the labor movement. 6 credits, $H U, R A D$; HI, IDS, Not offered in 2010-2011
230. Institutional Structure and Culture in the Middle Ages From churches to monasteries to universities to guilds, the medieval world was full of institutions that faced hard questions: How best to structure power and authority? What is our place in the wider world? How is our collective identity and ethos achieved, maintained, or transformed? How does the institution as a material community relate to the institution's mission and culture? What are the ideals and techniques of leadership? What do success and failure look like? Through theoretical readings and case studies, students will investigate medieval responses to these challenges, while analyzing the complex dynamics of institutional life more generally. 6 credits, HU; SI, Not offered in 2010-2011
232. Renaissance Worlds in France and Italy Enthusiasm, artistry, invention, exploration, inquiry... How do these stereotypical notions of Renaissance culture play out in texts and images of the period? Through a range of sources (fourteenth-sixteenth centuries) we will use literary and historical approaches to explore selected issues of the period, including the nature of education and the idea of the self; women, gender and society; artistic production as a mode of knowing; and the exploration of other worlds. 6 credits, ND, WR; HI, WR2, IS, Spring-V. Morse
233. Cultures of Empire: Byzantium, 710-1453 Heir to the Roman Empire, Byzantium proved to be one of the most enduring and fascinating polities of the medieval world. Through written and visual evidence, we will examine the central features of Byzantine history and culture from the period of Iconoclasm to the Empire's fall to the Ottoman Turks in 1453, concentrating on the nature and function of imperial rule; Byzantine aesthetics and religiosity; Byzantium's relations with the Latin West and Islam; and the changing nature of the Byzantine thought world. No prerequisites, but HIST 130 and/or CLAS 229 will be useful preparation. 6 credits, HU, RAD; HI, IS, Fall-W. North
235. Dante's Italy Italy at the end of the Middle Ages was an intricate patchwork of small states woven together by a vibrant and distinctive culture. We will examine the politics, law, economic life, culture, and spirituality of the independent city states like Florence and Milan, the Papal States (centered on Rome), and the Kingdom of Naples through texts, including selected works by Dante, buildings and city plans, and works of art. Our goal will be to develop a vivid sense of what life was like in the Italy of Dante, Boccaccio, Giotto, and Petrarch. 6 credits, HU, WR; HI, WR2, IS, Not offered in 2010-2011
236. Women's Lives in Pre-Modern Europe Did women have a Renaissance? Were women increasingly relegated to a separate sphere from men: "domesticated" into the household? Or, on the contrary, is the history of European women characterized by fundamental continuities? This course seeks to answer these questions through an exploration of women's place in the family and economy, laws and cultural assumptions about women, and women's role in religion. Throughout the term, we will be focusing not only on writings about women, but primarily on sources written by women themselves, as we seek a fuller understanding of the nature of European women's lives before the modern era. 6
237. The Enlightenment This course focuses on the texts of Enlightenment thinkers, including Locke, Montesquieu, Voltaire, Diderot, Rousseau, Kant and Mesmer. Emphasis will be on French thinkers and the effect of the Enlightenment on French society. The course covers the impact of the Enlightenment on science, religion, politics and the position of women. Students will have the opportunity to read the philosophies in French. 6 credits, HU, WR; HI, WR2, IS, Not offered in 2010-2011
238. Topics in Medieval History: Church, Papacy and Empire Over the course of the late eleventh century, the foundations of medieval society began to shake as monks and clerics, kings and princes, lay men and women, challenged the traditional order of European society, demanding purity, freedom, and justice for their church and the reform of institutions grown corrupt. Yet the traditional order had its defenders, too. In this course we will examine their intellectual and political struggles as they debate such issues as clerical marriage and purity, institutional corruption, the relationship of Church and King, the meaning of canon law, the concept of just war, and the power of the pope within the Church. 3 credits, HU; HI, IS, Not offered in 2010-2011
238. The World of Bede This course will examine the works and world of the Venerable Bede (c. 673731), one of the great Christian thinkers and historians of the Middle Ages and a key witness to the history of early medieval Ireland and Anglo-Saxon England. Through close study of Bede's Ecclesiastical History of the English People and other contemporary sources, we shall address such issues as Christian vs. Germanic rulership; the nature of religious conversion in early medieval societies; monasticism and conceptions of sanctity; Ireland and England as outposts of classical and Christian culture; and the problems of historical thought and writing in the early Middle Ages. 3 credits, $\mathrm{HU} ; \mathrm{HI}$, IS, Not offered in 2010-2011
239. Britain, c. 1485-1834: From Sceptred Isle to Satanic Mills This course traces the political, intellectual, economic and social history of the British Isles from the Tudor era to the Industrial Revolution. As we move from the world of Shakespeare to that of Jane Austen, we will follow changing British identities, the development of Atlantic slavery (and the subsequent move to emancipation), and revolutions in the political world. At the same time, we identify the origins and consequences of the fundamental economic and demographic changes associated with the demographic transition and industrialization. 6 credits, HU; HI, IS, Not offered in 2010-2011
240. Imperial Russia This course provides an introduction to the Russian imperial state as it evolved over centuries. We will focus on the immense diversity of the empire and the structures of domination and legitimacy that held it together. Major topics covered include imperial ideology, serfdom, the intelligentsia, and political opposition. 6 credits, HU; HI, IS, Not offered in 2010-2011
241. Russia through Wars and Revolutions The lands of the Russian empire underwent massive transformations in the tumultuous decades that separated the accession of Nicholas II (1894) from the death of Stalin (1953). This course will explore many of these changes, with special attention paid to the social and political impact of wars (the Russo-Japanese War, World War I, the Civil War, and the Great Patriotic War) and revolutions (of 1905 and 1917), the ideological conflicts they engendered, and the comparative historical context in which they transpired. 6 credits, HU; HI, IS, Not offered in 2010-2011
242. Russia Since 1953 We will explore the history of Russia and other former Soviet states in the period after the death of Stalin. We will investigate the nature of the late Soviet state and explore the different trajectories Russia and other post-Soviet states have followed since the end of the Soviet Union. 6 credits, HU; HI, IS, Not offered in 2010-2011
243. The Peasants are Revolting! Society and Politics in the Making of Modern France Political propaganda of the French Revolutionary period tells a simple story of downtrodden peasants exploited by callous nobles, but what exactly was the relationship between the political transformations of France
from the Renaissance through the French Revolution and the social, religious, and cultural tensions that characterized the era? This course explores the connections and conflicts between popular and elite culture as we survey French history from the sixteenth through early nineteenth centuries, making comparisons to social and political developments in other European countries along the way. 6 credits, HU; HI, IS, Not offered in 2010-2011
245. Ireland: The Origin of the Troubles The religious and political tensions and violence that have characterized modern Irish history have deep roots in centuries of troubled relations between Ireland and England. This course examines Irish history with a special focus on Anglo-Irish relations from Tudor colonization through the Great Hunger of the nineteenth century. We will also be examining the very different ways in which Irish history is told by nationalist and revisionist scholars. 6 credits, $H U, W R$; HI, WR2, IS, Not offered in 2010-2011
248. Berlin Program: Monuments and Memory: A Cultural History of Berlin Berlin is the center of a transnational space both German-speaking and vibrantly multicultural. This course will examine Berlin's complicated history and culture through its monuments, museums, and other sites of commemoration. Using Berlin as our text, we will gain insights into the significant historical events that shaped the society and culture of Germany's capital city. Where relevant, we will discuss developments in Germany and Central Europe more generally, and incorporate visits to nearby cities into the course. 6 credits, HU; HI, IS, Not offered in 2010-2011
249. Modern Central Europe An examination of the political, social, and cultural history of Central Europe from 1848 to the present day. We will explore the evolution of state and civil society in the multicultural/multinational regions of the present-day Czech Republic, Slovakia, Poland, Hungary, as well as eastern Germany and Austria. Much of the course will focus on the common experiences of authoritarianism, anti-Semitism, fascism/Nazism, and especially the Communist era and its dissolution. 6 credits, HU; HI, IS, Fall-D. Tompkins
250. Modern Germany This course offers a comprehensive examination of German history in the nineteenth and twentieth centuries. We will look at the German-speaking peoples of Central Europe through the prism of politics, society, culture, and the economy. Through a range of readings, we will grapple with the many complex and contentious issues that have made German history such an interesting area of intellectual inquiry. 6 credits, HU; HI, IS, Spring-D. Tompkins
253. Bureaucracy, Law, and Religion in East Asia One tends to interpret East Asian polity in terms of rule by person rather than rule by law and of the unity between politics and religion. Students will examine the validity of these traditional conceptualizations through an analysis of the intricate interactions between bureaucratic behaviors, legal parameters, and religious orientations as evolved in the East Asian historical societies from its beginnings to the present. Students will discuss the relationships between autocracy and bureaucracy, church and state, aristocracy and literati ideals, eunuch prerogatives, samurai ethics, and yangban protocols, with a focus on various bureaucratic configurations (public, private, ecclesiastical, parallel, and interstitial). 6 credits, HU; HI, IS, Not offered in 2010-2011
254. Colonialism in East Asia This course explores the colonialisms in East Asia, both internal and external. Students examine Chinese, Inner Asian, Japanese, and European colonialisms from the seventeenth century to the present. Geographically, students cover borderlands of East Asian empires (Tibet, Xinjiang, Mongolia, Manchuria, Fujian, Yunnan, Canton, Vietnam, Taiwan, Korea, Okinawa, and Hokkaido). Methodologically, students eschew power-politics and an historical studies of "frontier" regions in order to analyze everyday aspects of colonial arrangements and communities in different historical moments from the bottom up. Topics include ethnic identities, racial discourses, colonial settlements, opium regimes, violence and memory (e.g. Nanjing massacre), and forced labor migrations (e.g. comfort women). 6 credits, HU; HI, IS, Winter-S. Yoon
255. Press and Culture in East Asia What are the major distribution paths through which news and opinions are disseminated? Many believe that the modern press is one of the social and cultural bases within civil society and that it is not just a medium but a shaper of opinion in the public sphere. Students will test the validity of such claims by examining how the press reshaped printing and book culture in East Asia. Students will analyze communication circuits that link authors, journalists, shippers, booksellers, itinerant storytellers, readers, and listeners. Sources will be drawn from official gazettes, newsletters, pamphlets, handbills, rumor mills, pictorials, and cartoons. 6 credits, HU; HI, IS, SpringS. Yoon
259. Women in South Asia: Histories, Narratives, and Representation The objective of this course is to survey the historical institutions, practices and traditions that defined the position of women in India. We will examine the laws and religious traditions related to women in South Asia including marriage, inheritance, sati and purdah. We will also read a variety of women's writings including the poetry of buddhist nuns and medieval women saints, as well as stories and memoirs from the colonial and postcolonial period. The purpose of the course is to understand women in India as both the object and subject of history. 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
260. The Making of the Modern Middle East A survey of major political and social developments from the fifteenth century to the beginning of World War I. Topics include: state and society, the military and bureaucracy, religious minorities (Jews and Christians), and women in premodern Muslim societies; the encounter with modernity. 6 credits, HU; HI, IS, Not offered in 2010-2011
262. Post-colonial South Asia, 1947-Present This course will examine the questions and issues that faced post-independence India, Pakistan, Bangladesh and Sri Lanka. We will examine both the similarities and differences in how different nations dealt with the imprint of colonialism, the struggle for democracy, the relationship between religion and politics, women's movements; ecological movements, demands for regional autonomy and globalization. We will use a wide range of primary and secondary sources as well as theoretical texts to illuminate the specificities of post-colonial modernity. 6 credits, HU; NE, Not offered in 2010-2011
265. Central Asia in the Modern Age Central Asia--the region encompassing the post-Soviet states of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan, and the Xinjiang region of the People's Republic of China--is often considered one of the most exotic in the world, but it has experienced all the excesses of the modern age. After a basic introduction to the long-term history of the steppe, this course will concentrate on exploring the history of the region since its conquest by the Russian and Chinese empires. We will discuss the interaction of external and local forces as we explore transformations in the realms of politics, society, culture, and religion. 6 credits, HU; HI, IS, Not offered in 2010-2011
266. History of Islam in India The countries of South Asia--particularly India, Pakistan and Bangladesh--are collectively home to the world's largest Muslim population. This course will examine the history and significance of the expansion of Islam into the Indian subcontinent, with an emphasis on topics including poetry and art, trade, Islamic concepts of law and justice, mysticism, and popular religion. We will study the development of specifically Indian forms of Islam, with a focus on the interaction of Muslims with non-Muslim communities. We will also examine the wide variety of sociopolitical movements which emerged among Muslim communities in the colonial and post-colonial eras. 6 credits, HU; HI, IS, Winter-B. LaRocque
272. The Emergence of Modern Mexico This course examines the origins and development of Mexican nationalism from the early nineteenth century to the present day. Central to this course will be the question of how national identity and culture was contested and negotiated across racial, class, regional and gender divides. We will also attempt to deconstruct the cultural project of "lo mexicano" most closely associated with the decades immediately following the Mexican Revolution (1910-1917). 6
credits, HU, RAD; HI, IS, Spring—A. Fisher
273. Go-Betweens and Rebels in the Andean World This course examines the dynamics of imperial rule in the vertical world of the Andes from the time of the Inca, through Spanish rule, and beyond. Of particular interest will be the myriad roles played by indigenous intermediaries who bridged the social, political and cultural gap between their communities and the state. While critical for maintaining the imperial order, these individuals also served as a galvanizing source of popular resistance against the state. Emphasis will be placed on the reading of translated primary sources written by a diverse group of Andean cultural intermediaries and rebels. 6 credits, HU; HI, IS, Not offered in 2010-2011
276. The African Diaspora in Latin America A study of the participation of peoples of African descent in the creation of Latin American societies and culture. After an examination of the Atlantic slave trade, the course will survey the institution of African slavery in colonial societies with particular attention given to urban versus rural slavery, slave resistance and rebellion, maroon communities, gender relations, manumission, and cultural continuities and innovations. The course concludes with a consideration of the experiences of freed peoples in post-abolition societies and the historical legacy of slavery. Some background knowledge of Latin American history is recommended. 6 credits, $H U, R A D$; HI, IS, QRE, Not offered in 2010-2011
278. Religious Orthodoxy and Deviance in New Spain Largely through the prism of inquisition sources, this course explores popular religion in the Viceroyalty of New Spain and its relationship to Catholic orthodixy. Central themes will include ideas about conversion, resistance, local religion, and religious tolerance. Among other topics, we will study crypto-Judaism, the conversion of indigenous people to Catholicism, diabolism, popular saints, witchcraft and mysticism. The course will also explore the methodological challenges involved in using inquisition sources for the study of religion. 6 credits, HU, RAD; HI, IS, Fall-A. Fisher
279. American Intellectual History A study of selected moments in the history of ideas from Puritanism to Pragmatism. The major focus will be on the classic writing of William Bradford, Anne Hutchinson, Jonathan Boucher, William Bartram, Henry David Thoreau, Oliver Wendell Holmes, William James and John Dewey. Students will examine the ideas of one writer in depth and analyze that writer's attempt to shape public policy. Using Louis Menand's Prize-winning "The Metaphysical Club," we will explore the attempt of post-Civil War thinkers to craft a social philosophy for the modern world of industry and science. 6 credits, HU, WR; HI, WR2, Not offered in 2010-2011
280. African in the Arab World This course surveys the development of an African Diaspora in the Arab world. This community's emergence is linked to the movement of enslaved Africans across the Sahara Desert, up the Nile valley, and across the Red Sea. Highlighting communities in North Africa and the Middle East, this course looks at the diverse experiences of peoples whose black skin came to be equated with slave status, yet who also became loyal followers of Islam in an Arab world. It challenges students to conceive of an African Diasporic identity in which the "East" and Islam are central. 6 credits, HU, RAD; HI, IS, Offered in alternate years, Winter-T. Willis
281. War in Modern Africa This course examines the Nigerian Civil War, also known as the Biafra War, 1967-1970, and its implications for post-colonial Nigerian and African history. Clashes between two ethnic groups, the Igbo and the Hausa, culminated in a failed attempt by the Igbo-dominated south to secede from the nation of Nigeria and establish Biafra as an independent country. What role did colonialism play in igniting and fueling the tensions that culminated in the war? What was the role of the media in the war? What light does the Biafra War shed on modern conflict in Africa? 6 credits, HU, RAD; HI, IS, Offered in alternate years, Spring-T. Willis
283. Farm and Forest: African Environmental History We will explore the complex interaction between the African physical world of "nature" (plants, soils, water, climate) and "culture" or human society over time, from the pre-colonial through the colonial period to the present. We also seek to
understand the meanings (including cultural and symbolic meanings) associated with the African natural world, both for African societies and for non-Africans who have lived, worked, or been engaged with the continent. We will delve into controversies about land use, population growth, wildlife conservation, desertification and other topics. Each student will gain insight into a particular issue or case study through an independent research project. 6 credits, HU, RAD; NE, Not offered in 2010-2011
298. Junior-year History Colloquium In the junior year, majors must take six-credit reading and discussion course taught each year by different members of the department faculty. The general purpose of History 298 is to help students reach a more sophisticated understanding of the nature of history as a discipline and of the approaches and methods of historians. A major who is considering off-campus study in the junior year should consult with their adviser on when to take History 298. 6 credits, ND; HI, Fall, Winter-W. North, S. Zabin
306. Topics in Environmental History: American Wilderness Each year, this course will focus on a major issue in American or world environmental history. For 2010-11, the topic will be American Wilderness. To many Americans, wild lands are among the nation's most treasured places. Yosemite, Yellowstone, the Grand Canyon, Joshua Tree--the names alone evoke a sense of awe, naturalness, beauty, even love. But, where do those ideas and feelings come from, and how have they both reflected and shaped American cultural, political and environmental history over the last four centuries? These are the central issues and questions that we will pursue in this seminar. Prerequisite: History 195 or consent of instructor. 6 credits, HU; HI, Offered in alternate years, Winter-G. Vrtis
322. Civil Rights and Black Power This seminar frames the life and death of the civil rights and black power movements as rich experiments in political, social, cultural, religious, and intellectual theory and practice envisioned to create a racially liberal American state. 6 credits, $H U, R A D$; HI, Not offered in 2010-2011
324. The Concord Intellectuals The social and intellectual history of the American Renaissance with focus on selected works of Emerson, Thoreau, Amos Bronson Alcott, and Margaret Fuller. Special emphasis will be placed on the one common denominator uniting these intellectuals: their devotion to the possibilities of democracy. Prerequisite: History 120 or consent of the instructor. 6 credits, $\mathrm{HU} ; \mathrm{HI}$, Not offered in 2010-2011
330. Gender, Ethics and Power in Medieval France What comprised the ethical fabric of medieval France? How was it created and understood over the generations? This course explores the ways in which men and women from the twelfth through the fifteenth centuries explored essential questions about their society: What was love? What factors shaped relations between men and women? How did one know right from wrong? What are the obligations between men and women, rich and poor, knight and lord, merchant and seller, humans and God? What kinds of violence were just, why, and for whom? 6 credits, HU; HI, IS, Not offered in 2010-2011
333. Iconoclasm What roles do images play in society? What are these images thought to be and to do? Why, at particular moments, have certain groups attempted to do away with images either completely or in specific settings? How do images create and threaten communities and how is the management of the visual integrated with and shaped by other values, structures, and objectives? This course will examine these questions by looking in depth at iconoclasm in Byzantium and in Protestant Europe and by examining theoretical discussions of images, vision, and cognition from the fourth-sixteenth centuries. Discussion intensive with a research component. 6 credits, HU, WR; HI, WR2, IS, Not offered in 20102011
346. The Holocaust This course will grapple with the difficult and complicated phenomenon of the genocide of the Jews of Europe. We will explore anti-Semitism in its historical context, both in the German-speaking lands as well as in Europe as a whole. The experience of Jews in Nazi Germany will be an area of focus, but this class will look at European Jews more broadly, both before and during the

Second World War. The question of responsibility and guilt will be applied to Germans as well as to other European societies, and an exploration of victims will extend to other affected groups. 6 credits, HU; HI, IS, Offered in alternate years, Winter-D. Tompkins
353. Intellectuals and the State Power in East Asia A course to explore issues concerning the evolving relations between intellectuals and the state power in East Asia with an emphasis on developing the skills to analyze primary sources. 6 credits, $H U, W R ; H I, W R 2, I S$, Not offered in 20102011
360. Muslims and Modernity Through readings in primary sources in translation, we will discuss the major intellectual and cultural movements that have influenced Muslim thinkers from the nineteenth century on. Topics include modernism, nationalism, socialism, and fundamentalism. Prerequisite: at least one prior course in the history of the Middle East or Central Asia or Islam. 6 credits, $H U, W R$, RAD; HI, WR2, IS, Not offered in 2010-2011
381. History, Memory and the Atlantic World: Ghana and the United States This reading and research seminar prepares students for a winter-break field trip in Ghana. It investigates four major questions: did contemporary Gold Coast merchants participate in the Atlantic world slave trade as willing partners or did they make irrational decisions? How do Ghanaians remember slavery, British colonization, and the struggle for independence? What roles did W.E.B. Du Bois, Marcus Garvey, Shirley Graham Du Bois, and Richard Wright play in Ghana's cultural life? Why did Maya Angelou and other American writers and artists move to Ghana during the Civil Rights Movement? This course is part of the OCS winter break program involving two linked courses in fall and winter; this clas is the first class in the sequence. 6 credits, HU, RAD; HI, IS, Fall-H. Williams
382. History, Memory, and the Atlantic World: On Site and Revisited This course is the second part of a two-term sequence beginning with History 381. The first part of the seminar is a 15 -day winter break field trip to Ghana. Fieldwork begins in Accra, the seat of national government since 1877. The capital is the base for lectures by University of Ghana professors and for visits to sites representing important moments in Ghana's post-colonial history. The trip continues to Kumasi, capital of the Ashanti Region and once an inland terminus of major slave trading routes to the Atlantic coast. Kumasi is the base for day trips to traditional craft villages and for lectures by professors at Kwame Nkrumah University of Science and Technology (KNUST). 6 credits, HU; HI, IS, Winter-H.Williams
386. Disease, Health, and Healing in Modern African History In this course, we will examine the history of disease, health, and healing in the context of changing economic, cultural, and political relations in Africa. Topics to be discussed include African medical ideas and practices, therapeutic pluralism, colonial medicine, social/public responses to disease, patient experiences, and controversies surrounding HIV/AIDS. We will pay attention to questions of power, agency, and gender as we discuss these topics. The course will highlight the key themes, historiographies, and methodologies in the history of disease, health, and healing in modern African history. 6 credits, HU; HI, IS, Not offered in 2010-2011
395. Transnational Black History Since 1945 An interdisciplinary seminar, this course places postwar U.S. black history in transnational context by examining flows of people, information, and images with parallel liberation movements in the Third World, including Ghana, Cuba, and what Vijay Prashad theorizes as the "darker nations." Major research paper required. 6 credits, HU; HI, IS, Spring- $\boldsymbol{H}$. Williams
395. Colonialism This course begins with a consideration of classic and recent scholarship on colonialism, including both theoretical and historical works, covering distinct eras and areas of the globe. The second half of the term will be devoted primarily to the development of individual research projects, each concerning an aspect of colonialism grounded in a particular historical context. Students will present their findings to their peers and produce a $25-30$ page paper. 6 credits, $H U, W R ; H I, W R 2$,
395. Controversial Histories: Conflict, Polemic, and Persuasion in Medieval and Modern Worlds This seminar explores the history of how people in the pre-modern world discussed, debated and decided the issues, ideals, and policies that shaped their lives, communities, and world. Particular attention will be paid to the role of institutions and individuals, networks, the form and functions of polemical discourse, and the dynamics of group formation and stigmatization of the historical unfolding of conflict and consensus. Theoretical readings and case studies of conflicts from late antique, medieval, and early modern periods will provide the common readings for the seminar. 6 credits, $H U, W R ; H I$, WR2, Fall—W. North
397. Senior Research Proposal Completion of a research proposal, working with an adviser. Satisfactory completion of this senior requirement depends upon approval of the proposal by the faculty adviser and the department. 3 credits, S/CR/NC, HU; HI, Fall—Staff
398. Advanced Historical Writing This course is designed to support majors in developing advanced skills in historical research and writing. Through a combination of class discussion, small group work, and one-on-one interactions with the professor, majors learn the process of constructing sophisticated, well-documented, and practice strategies for engaging critically with contemporary scholarship and effective techniques of peer review and the oral presentation of research. Concurrent enrollment in History 400 required. By permission of the instructor only. 6 credits, $S / C R / N C, H U, W R ; H I, W R 2$, Winter-A. Igra, S. Zabin
400. Integrative Exercise Completion and defense of a substantial (approximately 34-40 page) original research paper, written in consultation with a faculty adviser. Concurrent enrollment in History 398 required. 3 credits, $S / N C$, $N D$; NE, Winter-Staff

## INTERDISCIPLINARY STUDIES

99. Summer Science Institute This course consists of three one-week seminars with faculty from various departments in the sciences. Topics change from year to year, depending on faculty interests. Classes consist of a mix of lecture, hands-on activities, problem sets, and completion of an independent research project. For high school juniors and seniors. 6 credits, $S / C R / N C$, ND; NE, Summer—Staff
100. Measured Thinking: Reasoning with Numbers about World Events, Health, Science and Social Issues This interdisciplinary course addresses one of the signal features of contemporary academic, professional, public, and personal life: a reliance on information and arguments involving numbers. We will examine how numbers are used and misused in verbal, statistical, and graphical form in discussions of world events, health, science, and social issues. Students will also apply quantitative reasoning skills to assist community organizations. 6 credits, AI, WR1, QRE, Fall—N. Lutsky
101. Focus Colloquium This colloquium is designed to give students participating in the Focusing on Cultivating Scientists program an opportunity to learn and use skills in scientific study, reasoning, and modeling. The topics of this project-based colloquium will vary each term, and allow students to develop competencies in areas relevant to multiple science disciplines. 2 credits, $S / C R / N C, N D ; N E$, Fall, Winter, Spring-E. Egge
102. MMUF Research Seminar This seminar develops the skills needed to engage in and communicate advanced research. Each participant will work and present regularly on their ongoing research projects, and participate actively in an ongoing series of workshops and conferences. The seminar will also discuss in depth the nature of academia as institution and culture, and the role of diversity in the production of knowledge and teaching in American higher education. Prerequisite: MMUF fellow status. 2 credits, S/CR/NC, ND; NE, Fall, Winter, Spring-W. North
103. Talking about Diversity In this course students learn about categories and theories related to social identity, power, and inequality, and explore how complex variables related to race, gender, class, and sexuality affect individual experience and communal structures. Students complete readings and engage in experiential exercises that invite them to reflect on their own social identities and their reactions to difference, diversity, and conflict. Students are required to keep a weekly journal and to participate in class leadership or a special project. Prerequisite: Permission of the instructor. 2 credits, S/CR/NC, ND; NE, Fall-A. Estill
104. Writing Science This course will explore how scientists communicate. Focused on communication expected in the sciences. The assignments will range among math and natural science disciplines, using data, graphics and text for a variety of purposes. Students should expect reading, writing, and speaking assignments tailored to a variety of audiences, including professional scientific audiences and the broader community. Prerequisite: At least one previous or concurrent introductory mathematics or natural science course. 6 credits, $N D, W R$; LA, WR2, QRE, Winter-C. Blaha, C. Rutz
105. Economic and Social Justice Traditionally economists have focused primarily on the material well-being of individuals as a measure of their welfare, but philosophers and others have found this material focus limiting, arguing that utility maximization does not do justice to the complexity of human beings. This reading course will examine various definitions of social justice and the impact of these different concepts on economic objectives, outcomes and policies. Attendance and class participation are mandatory for credit. 2 credits, S/CR/NC, ND; SI, Fall—M. Hemesath
106. Uses and Abuses of Behavioral Research We will explore ethical dilemmas that arise during the conduct of scientific studies (e.g. treatment of participants) and dilemmas that arise in the application or use of scientific findings. We will examine these issues by first exploring our own ethical decision making practices (e.g. principles that guide our decisions and actions); then we'll consider similar and unique challenges faced by scientists attempting to balance personal and professional goals with ethical principles; then we'll discuss examples of experiments that raise ethical questions (e.g. how did scientists deal with those dilemmas); and end with real world uses and applications of scientific findings. 3 credits, S/CR/NC, ND; SI, Not offered in 2010-2011

## INTERNATIONAL RELATIONS MAJOR

See Political Science.

## JAPANESE

See Asian Languages and Literatures.

## JUDAIC STUDIES

Director: Associate Professor Stacy Beckwith
Judaic Studies at Carleton provides students with the opportunity to explore aspects of Jewish civilization in its historical and contemporary manifestations from the perspectives of a variety of modern disciplines. Judaic Studies examines Jewish history, thought, literature and social life as dimensions of the unique experience of the Jewish people within humanity's diverse cultural endeavors.

Students may petition for a special major in Judaic Studies, or take a concentrated program within a major in Religion. Judaic Studies courses are offered on a regular basis by the Religion Department. From year to year, courses pertinent to Judaic Studies may be offered within other departments as well. For Hebrew course descriptions, refer to listings for Hebrew.

## Other Courses Pertinent to Judaic Studies:

HEBR 100 Personal and National Identity in Israeli and Palestinian Literature
HEBR 101, 102, 103 Elementary Modern Hebrew
HEBR 204 Intermediate Modern Hebrew
HEBR 221 Israeli Literature in the Middle East
HEBR 222 Discovering Literary Tel Aviv and Jerusalem (Not offered in 2010-2011)
HEBR 223 Faith and Fiction: Exploring Israeli National Identity (Not offered in 2010-2011)
HEBR 241 Israel in A. B. Yehoshua's Literature (Not offered in 2010-2011)
HEBR 291 and 391 Independent Study
MELA 230 Jewish Collective Memory
RELG 120 Introduction to Judaism (Not offered in 2010-2011)
RELG 124 Jews and the American Experience (Not offered in 2010-2011)
RELG 160 Living Jewish Texts: Reading, Wrestling and Ritualizing
RELG 222 State of Judaism in the State of Israel (Not offered in 2010-2011)
RELG 223 Research on Israel (Not offered in 2010-2011)
RELG 234 Way of Wisdom: Job and Ecclesiastes (Not offered in 2010-2011)
RELG 269 Jewish Ethics (Not offered in 2010-2011)
RELG 271 Religious and Moral Issues of Holocaust (Not offered in 2010-2011)
RELG 291 and 391 Independent Study
RELG 326 Approaching the Jewish Body
RELG 327 Genesis (Not offered in 2009-2010)
Students interested in Judaic Studies at Carleton or in off-campus programs in Judaica should consult with the Director of Judaic Studies.

See also Hebrew.

## LATIN AMERICAN STUDIES (LTAM)

## Director: Associate Professor Al Montero

Committee Members: Becky J. Boling, Jorge Brioso, José Cerna-Bazán, Adriana Estill, Adrienne Falcón, Andrew B. Fisher, Jerome Levi, Silvia L. López, Alfred P. Montero, Beverly Nagel, Diane Pearsall, Yansi Pérez

The Latin American Studies Program provides a framework for studying the diverse societies of Latin America. With its cultural mosaic shaped by the meeting of Native American, European, African, and Asian peoples, and its profound geographic, social, and economic variations, Latin America presents rich opportunities for interdisciplinary and cross-cultural study. By drawing upon the perspectives and methodologies of several disciplines, students are challenged to pursue a deeper understanding of the cultures, institutions, and experiences of Latin Americans. The program provides a forum for examining the intersection of issues of politics, economic development, ethnicity, gender, religion, and cultural expression.

## Requirements for a Major

Students complete a minimum of sixty-six credits in approved courses for the major. Majors must also demonstrate competence in Spanish by completing Spanish 205 or equivalent.

Required Courses: (The following core courses are required of all majors):
HIST 170 Modern Latin America, 1810-present
LTAM 200 Issues in Latin American Studies
LTAM 400 Integrative Exercise

In addition, majors are required to complete: Two 300-level Latin American literature courses, One 300-level History or Social Science course focused on Latin America, and 30 additional credits of electives from the list below.

Students are strongly encouraged to complete the 300 -level history or social science course prior to writing their integrative exercise, and to select a 300 -level course in a discipline appropriate to the focus of their anticipated comps topic. Students who complete this requirement with a 300-level history course must take at least one approved social science course as an elective.

Up to 27 credits from work in approved off-campus programs may be counted as electives for the major. Students may count up to 12 credits in comparative and/or U.S. Latino courses as electives. These courses are indicated by an asterisk on the list below. No more than four courses (twenty-four credits) in any one discipline may apply to the major.

## Latin American Studies Courses

200. Issues in Latin American Studies This required course for Latin American Studies concentrators and majors explores issues pertinent to the study of Latin America, including an examination of what constitutes Latin American area studies and Latin America itself, the history of the field, the perception in and outside of academia, the way such perceptions shape public policy, the contributions of Latin America to the arts, culture, economics, and the changing nature of Latin American Studies in the face of globalization. Designed by the faculty in Latin American Studies, the course will include regular guest lectures from among these faculty. 6 credits, ND; HI, IS, Spring-S. López
201. Brazil Culture and Politics This course will focus in depth on political and historical patterns of Brazil's economic, social, and cultural development from colonial times to its current democracy. The Brazil case study offers a wealth of lessons concerning the contradictions and possibilities of economic, social, and cultural development in the world today. We will explore these lessons through literature, music, architecture, and the arts as they speak to the perils of the country's insertion into global capitalism and to its political history which reflects the difficulties of creating and deepening democracy and building centers of political authority in the context of growing social inequalities and industrialization. Prerequisites: Latin American Studies 200. 6 credits, ND; SI, IS, Not offered in 20102011
202. Brazil Research Seminar Brazil research on-site in Rio de Janeiro and São Paulo during winter break. Writing and presentation of research projects during winter term. Prerequisite: Latin American Studies 370. 6 credits, ND; SI, IS, Not offered in 2010-2011
203. Latin American Forum This colloquium will explore specific issues or works in Latin American Studies through discussion of a common reading, public presentation, project, and/or performance that constitute the annual Latin American Forum. Students will be required to attend two meetings during the term to discuss the common reading or other material and must attend, without exception, ALL events of the Forum which take place during fourth week of spring term (on Friday afternoon and Saturday morning). A short integrative essay or report will be required at the end of the term. Intended as capstone for Latin American Studies concentrators. 2 credits, S/CR/NC, ND; HI, IS, Spring-Y. Pérez
204. Integrative Exercise Satisfactory completion of the major includes the writing of a thesis which attempts to integrate at least two of the various disciplines studied. A proposal must be submitted for approval early in the fall term of the senior year. The thesis in its final form is due no later than the end of the first week of spring term. An oral defense of the thesis is required. 6 credits, $S / N C, N D ; N E$, Fall, Winter, Spring-J. Cerna-Bazán, S. López, A. Montero

## Other Courses Pertinent to Latin American Studies

ECON 240 Microeconomics of Development

ECON 241 Growth and Development
HIST 169 Colonial Latin America 1492-1810 (Not offered in 2010-2011)
HIST 170 Modern Latin America 1810-Present
HIST 272 The Emergence of Modern Mexico
HIST 273 Go-Betweens and Rebels in the Andean World (Not offered in 2010-2011)
HIST 276 The African Diaspora in Latin America (Not offered in 2010-2011)
HIST 278 Religious Orthodoxy and Deviance in New Spain
POSC 221 Latin American Politics (Not offered in 2010-2011)
POSC 233 Corruption, Authoritarianism, and Democracy (Not offered in 2010-2011)
POSC 322 Political Economy of Latin America* (Not offered in 2010-2011)
POSC 323 Cuban Politics Seminar
RELG 227 Liberation Theologies (Not offered in 2010-2011)
RELG 284 The Virgin of Guadalupe (Not offered in 2010-2011)
SOAN 234 Ecology, Economy, and Culture
SOAN 250 Ethnography of Latin America (Not offered in 2010-2011)
SOAN 251 Guatemala Prog: Resource Mgmt, Community Develpmnt \& Soc Change in Guatemala \& Chiapas (Not offered in 2010-2011)
SOAN 259 Comparative Issues in Native North America
SOAN 295 Guatemala Program: Field Methods and Individual Research Project (Not offered in 2010-2011)
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2010-2011)
SPAN 220 Magical Realism in Latin American Narrative
SPAN 238 Images of the Indian in Spanish American Literature (Not offered in 2010-2011)
SPAN 242 Introduction to Latin American Literature
SPAN 243 Latin American Theater in Translation: Nation, Power, Gender (Not offered in 20102011)

SPAN 252 Love Stories in Latin American Prose (Not offered in 2010-2011)
SPAN 255 Women Dramatists in Latin America: Staging Conflicts (Not offered in 2010-2011)
SPAN 259 Mexico Program: Images of Mexico in Literature and Popular Culture (Not offered in 2010-2011)
SPAN 260 Forces of Nature (Not offered in 2010-2011)
SPAN 262 Myth and History in Central American Literature (Not offered in 2010-2011)
SPAN 263 History of Human Rights (Not offered in 2010-2011)
SPAN 266 Postwar Central American LIterature
SPAN 326 Writers in Exile (Not offered in 2010-2011)
SPAN 336 Genealogies of the Modern: Turn of the Century Latin America
SPAN 340 Latin American Prose: Dictatorships and Revolution in the Latin American Narrative (Not offered in 2010-2011)
SPAN 342 Latin American Theater: Nation, Power, Gender (Not offered in 2010-2011)
SPAN 344 Women Writers in Latin America: Challenging Gender and Genre (Not offered in 20102011)

SPAN 350 Recent Trends in Latin American Narrative: Pop Culture and Testimony
SPAN 353 History and Subjectivity in Latin American Poetry
SPAN 356 The Cuban Revolution and the Revolution of Literature
SPAN 358 Topics in Hispanic Literature: The Spanish Civil War (Not offered in 2010-2011)

## LATIN AMERICAN STUDIES CONCENTRATION

Director: Associate Professor Alfred P. Montero

The Latin American Studies Concentration provides students with a framework for developing a deeper understanding of Latin American history, society, and culture from an interdisciplinary perspective, and is intended to complement a disciplinary major. Concentrators pursue a program of study combining language training with courses in the humanities and social sciences, culminating in a capstone experience, the Latin American Forum.

## Requirements for the Concentration

HIST 170 Modern Latin America, 1810-present
LTAM 200 Issues in Latin American Studies
LTAM 398 Latin American Forum
One additional survey course, selected from:
POSC 221 Latin American Politics (Not offered in 2009-2010)
SOAN 250 Ethnography of Latin America (Not offered in 2009-2010)
SPAN 242 Introduction to Latin American Literature
And 30 credits in electives
Concentrators must also complete Spanish 204 or equivalent. Electives may be chosen from the following list, with at least 12 credits drawn from arts and literature and twelve from social sciences and history. No more than three courses from the student's major may apply to the concentration, and no more than three in the same discipline. Up to twelve credits may be comparative or Latino in focus (AMST 226, ECON 240, ECON 241, POSC 233, RELG 227, SOAN 234, SOAN 259, SOAN 302). Up to 18 credits from approved off-campus programs may be counted as electives.

## Elective Courses:

Group I: Arts and Literature
AMST 226 Latinas in Hollywood (Not offered in 2010-2011)
SPAN 238 Images of the Indian in Spanish American Literature (Not offered in 2010-2011)
SPAN 242 Introduction to Latin American Literature
SPAN 243 Latin American Theater in Translation: Nation, Power, Gender (Not offered in 20102011)

SPAN 255 Women Dramatists in Latin America: Staging Conflicts (Not offered in 2010-2011)
SPAN 259 Mexico Program: Images of Mexico in Literature and Popular Culture (Not offered in 2010-2011)
SPAN 260 Forces of Nature (Not offered in 2010-2011)
SPAN 262 Myth and History in Central American Literature (Not offered in 2010-2011)
SPAN 263 History of Human Rights (Not offered in 2010-2011)
SPAN 326 Writers in Exile (Not offered in 2010-2011)
SPAN 336 Genealogies of the Modern: Turn of the Century Latin America
SPAN 340 Latin American Prose: Dictatorships and Revolution in the Latin American Narrative (Not offered in 2010-2011)
SPAN 342 Latin American Theater: Nation, Power, Gender (Not offered in 2010-2011)
SPAN 344 Women Writers in Latin America: Challenging Gender and Genre (Not offered in 20102011)

SPAN 350 Recent Trends in Latin American Narrative: Pop Culture and Testimony
SPAN 353 History and Subjectivity in Latin American Poetry
SPAN 356 The Cuban Revolution and the Revolution of Literature
SPAN 358 Topics in Hispanic Literature: The Spanish Civil War (Not offered in 2010-2011)

## Group II: Social Sciences and Humanities

ECON 240 Microeconomics of Development

ECON 241 Growth and Development
ENTS 253 Social and Environmental Movements of Latin America
HIST 169 Colonial Latin America 1492-1810 (Not offered in 2010-2011)
HIST 170 Modern Latin America 1810-Present
HIST 272 The Emergence of Modern Mexico
HIST 273 Go-Betweens and Rebels in the Andean World (Not offered in 2010-2011)
HIST 276 The African Diaspora in Latin America (Not offered in 2010-2011)
POSC 221 Latin American Politics (Not offered in 2010-2011)
POSC 233 Corruption, Authoritarianism, and Democracy (Not offered in 2010-2011)
POSC 322 Political Economy of Latin America* (Not offered in 2010-2011)
POSC 323 Cuban Politics Seminar
RELG 227 Liberation Theologies (Not offered in 2010-2011)
RELG 284 The Virgin of Guadalupe (Not offered in 2010-2011)
SOAN 234 Ecology, Economy, and Culture
SOAN 250 Ethnography of Latin America (Not offered in 2010-2011)
SOAN 259 Comparative Issues in Native North America
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2010-2011)

## LINGUISTICS (LING)

Chair: Professor Michael J. Flynn
Professor: Michael J. Flynn
Assistant Professors: Catherine Rose Fortin, Cherlon L. Ussery
Linguistics is the study of the human language faculty, surely one of the most central components of human nature. We study language from a variety of perspectives, including the construction of illuminating descriptions of these extraordinarily complex systems, their acquisition by young children, their realization in the brain, how they change over time, among others.

We offer a major which emphasizes theoretical creativity and the ability to articulate insights in both written and oral presentation, preparing students to confidently engage complexity and to make sophisticated original contributions to intellectual inquiry more generally.

## Requirements for a Major

A total of 69 credits
Nine courses in Core Linguistics:
Linguistics 100 or 110 or 180; 115, 216, and 217; and three 300-level courses drawn from: 315, $316,317,325,340$; and 399 and 400.

Three electives:
At least two drawn from: Linguistics 170, 220, 250, 265, 270, 275, 280, or Asian Languages 111, 260. At most one drawn from: Computer Science 232, 254, 322, Philosophy 110, 210, 220, 253, Psychology 234, 364, 366, 375, Sociology/Anthropology 274.

## Linguistics Courses

100. The Noun We've all been taught that nouns are people, places, and things. Yet, these seemingly simple linguistic objects are surprisingly complex. For instance, languages vary in what information (e.g., case, gender, person, number) nouns display. Even within a single language, the form of a noun may change depending on its function within a sentence or its function within a conversation. This
course uses contemporary linguistic theories to account for the many varied forms of nouns throughout the world's languages. No familiarity with languages other than English is required. 6 credits, AI, WRI, Fall-C. Ussery
101. Introduction to Linguistics The capacity to acquire and use natural languages such as English is surely one of the more remarkable features of human nature. In this course, we explore several aspects of this ability. Topics include the sound systems of natural languages, the structure of words, principles that regulate word order, the course of language acquisition in children, and what these reveal about the nature of the mind. 6 credits, SS; FSR, Winter, Spring-C. Fortin, C. Ussery
102. Introduction to the Theory of Syntax This course is organized to enable the student to actively participate in the construction of a rather elaborate theory of the nature of human cognitive capacity to acquire and use natural languages. In particular, we concentrate on one aspect of that capacity: the unconscious acquisition of a grammar that enables a speaker of a language to produce and recognize sentences that have not been previously encountered. In the first part of the course, we concentrate on gathering notation and terminology intended to allow an explicit and manageable description. In the second part, we depend on written and oral student contributions in a cooperative enterprise of theory construction. No prerequisite. 6 credits, SS; FSR, Fall, Winter-C. Fortin, M. Flynn
103. Linguistics of the Japanese Writing System The Japanese writing system is often said to be the most complicated in the world, even as Japan has among the very highest literacy rates. In this course, we will closely examine this extraordinary aspect of Japanese society, including its history, relationship with the spoken language, psychological processing, and neural implementation. Finally, we will examine the controversy concerning the use of kanji, its political ramifications, and look at how the Japanese are responding to various pressures on the system. Experience with Japanese is not necessary. 6 credits, SS; FSR, Not offered in 2010-2011
104. The Structure of Japanese This course will examine some aspects of Japanese from the viewpoint of linguistic theory. It is not conducted in Japanese, nor is it a course in which students will learn Japanese. Instead, we will look at the language in the same way that a biologist might look at a complicated organism, as an interesting object of study. We will examine its history, aspects of its structure, its use in social and artistic contexts, as well as its extraordinary writing system. Some knowledge of Japanese would be helpful, but is not required. No knowledge of linguistics will be presupposed. No prerequisites. 6 credits, SS; FSR, Not offered in 2010-2011
105. Morpho-Syntax Morphology is the study of the principles that regulate the construction of words in natural languages. Syntax examines the structure of sentences. The goal of this course is to help the participants become skilled managers of both theories. Prerequisite: Linguistics 115.6 credits, $S S ; F S R$, Spring-C. Fortin
106. Phonetics and Phonology Although no two utterances are ever exactly the same, we humans don't function like tape recorders; we overlook distinctions to which mechanical recording devices are sensitive, and we "hear" contrasts which are objectively not there. What we (think we) hear is determined by the sound system of the language we speak. This course examines the sound systems of human languages, focusing on how speech sounds are produced and perceived, and how these units come to be organized into a systematic network in the minds of speakers of languages. Prerequisite: Any 100 level course in Linguistics. 6 credits, SS; FSR, Fall—M. Flynn
107. Case and Agreement The form words take is, in part, governed by complex systems called "case" and "agreement." In general, case refers to forms of nouns and agreement refers to forms of verbs. We go beyond familiar case patterns in which subjects are Nominative and objects are Accusative and familiar agreement patterns in which verbs display the person, gender, and/or number of subjects. We discover that nouns can bear a variety of cases and that agreement comes in many forms. Using syntactic theory, we explore the interaction between how languages construct words and sentences. No familiarity
with languages other than English is required. Prerequisite: Any 100 level Linguistics course. 6 credits, SS; FSR, Offered in alternate years, Spring-C. Ussery
108. Language and Brain Topics include: the history of the field, agrammatism, fluent aphasia, acquired dyslexias, the role of the non-dominant hemisphere, bilingualism, and subcortical structures. Prerequisite: Any 100 level course in Linguistics. 6 credits, SS; FSR, Offered in alternate years, Not offered in 2010-2011
109. Language, Speech, and Evolution Languages can be thought of as abstract devices that link signals and messages. For the signal part, the vast majority of human languages use speech. Speech production and speech perception are both very complicated, probably unique to human beings, and "tuned" to each other in interesting ways. In this course we will have a close look at the relevant mechanisms, with the goal of approaching the question of how this remarkable system could have arisen in our species. Prerequisite: Any 100 level course in Linguistics. 6 credits, SS; FSR, Offered in alternate years, Not offered in 2010-2011
110. First Language Acquisition Humans are unique among animals in that we are able to attain native speaker competency in any language(s) we receive a sufficient amount of exposure to during our development. The path of acquisition is remarkably stable regardless of the language(s) being acquired, and is believed to yield insights into the nature of human language. In this course, we explore children's capacity to acquire language, with a focus on its implications for linguistic theory. Topics include acquisition of phonology, morphology, syntax, and semantics, and acquisition in extraordinary circumstances. Prerequisite: Any 100 level course in Linguistics. 6 credits, SS; LS, Offered in alternate years, Winter-C. Fortin
111. Field Methods in Linguistics This course will introduce students to techniques of linguistic research and analysis through direct work with a native speaker of a language not taught at Carleton. Students will learn techniques for eliciting, organizing, describing, and analyzing data in an ethically responsible and scientifically rigorous manner. Our goal is to develop a description of the language-primarily, aspects of its phonology, morphology, and syntax--through working exclusively with a native speaker. Each student will investigate some aspect of the language in depth, culminating in a class presentation and research report. Prerequisite: Any 100 level Linguistics course. 6 credits, $S S ; L S$, Offered in alternate years, Not offered in 2010-2011
112. The Linguistics of the Japanese Writing System The Japanese writing system is often said to be the most complicated in the world, even as Japan has among the very highest literacy rates. In this course, we will closely examine this extraordinary aspect of Japanese society, including its history, relationship with the spoken language, psychological processing, and neural implementation. Finally, we will examine the controversy concerning the use of kanji, its political ramifications, and look at how the Japanese are responding to various pressures on the system. Experience with Japanese is not necessary. Prerequisite: Any 100 level course in Linguistics. 6 credits, SS; SI, IS, Offered in alternate years, Spring-Michael Flynn
113. The Structure of Japanese This course examines the nature of the Japanese language through the lens of contemporary linguistic theory. Topics include the history of the language, its sound structure, word formation operations, syntax, and its use in social and artistic contexts. This course is not intended to teach students to speak Japanese, and while experience with Japanese would be helpful, it is not necessary. Prerequisite: Any 100 level course in Linguistics. 6 credits, SS; FSR, IS, Offered in alternate years, Spring—Doshisha University faculty
114. Topics in Syntax More on syntax. Particular topics vary by year and student interest. Prerequisite: Linguistics 216. 6 credits, SS; FSR, Fall-C. Ussery
115. Topics in Morphology This course explores how languages form words and how contemporary
theories account for this complicated process. We concentrate primarily on the interaction between morphology and syntax, but we may also explore the relationship between morphology and phonology. While we will investigate a wide variety of languages, no familiarity with any language other than English is required. Prerequisite: Linguistics 216. 6 credits, SS; FSR, Offered in alternate years, Not offered in 2010-2011
116. Topics in Phonology More on phonology, with special attention to issues involving the evolution of sound systems and their development in children. Prerequisite: Linguistics 217.6 credits, $S S ; F S R$, Winter-M. Flynn
117. Syntax of an Unfamiliar Language In this course we examine, with the help of a native speaker consultant, the syntax of a language deliberately chosen for its being unfamiliar to all the participants. Our goals will be to construct a coherent and theoretically respectable account of principles of the grammar of this language, and to understand what our account reveals about the structure of human language generally. Each student will investigate some aspect of the syntax of the language in depth, culminating in a class presentation and research report. Prerequisite: Linguistics 216 . 6 credits, $S S$; $L S$, Not offered in 2010-2011
118. Topics in Semantics Semantics is the study of meaning (broadly construed) in language. In this course we explore several objects of inquiry within the field of semantics, including compositional semantics (i.e., the computation of meaning over syntactic structures), lexical semantics, argument structure, and pragmatics. Prerequisite: Linguistics 216. 6 credits, SS; FSR, Spring-C. Ussery
119. Senior Thesis 3 credits, S/CR/NC, ND; FSR, Fall—M. Flynn
120. Integrative Exercise 3 credits, $S / N C$, $N D$; NE, Winter-M. Flynn

## Other Courses Pertinent to Linguistics:

ASLN 111 Writing Systems
ASLN 260 Historical Linguistics (Not offered in 2010-2011)
CS 202 Mathematics of Computer Science
CS 254 Automata and Computability
PHIL 210 Logic
PSYC 234 Psychology of Language
SOAN 274 Language, Culture and Society

## LITERARY AND CULTURAL STUDIES (LCST)

101. Cross-Cultural Psychology Seminar in Prague: Communicating in Czech This language course will meet twice per week and emphasize basic listening and speaking skills. Students will be challenged to utilize their new language skills in everyday situations. 4 credits, $S / C R / N C$, ND; NE, Fall—NonCarleton faculty
102. Introduction to Critical Methods: Structure, Gender, Culture What does it mean to interpret? What questions do we ask of texts and images, and how do we go about finding our answers? In this course we will examine a number of strategies for reading works (such as novels, stories, images, films), drawing on a variety of national traditions. Topics include rhetoric, translation, post-structuralism, cultural studies, and gender studies. 6 credits, $A L$, WR; LA, WR2, IS, Winter-S. Carpenter

MATHEMATICS (MATH)
Chair: Professor Stephen F. Kennedy

Professors: Laura M. Chihara, Jack Goldfeather, Deanna Beth Haunsperger, Stephen F. Kennedy, Mark Krusemeyer, Gail S. Nelson, Jeffrey R. Ondich, Samuel E. Patterson<br>Associate Professors: Robert P. Dobrow, Eric S. Egge<br>Assistant Professors: Katherine R. St. Clair, Helen Wong<br>Visiting Assistant Professor: Jonathan Armel

Mathematics is an art, a pure science, a language, and an analytical tool for the natural and social sciences, a means of exploring philosophical questions, and a beautiful edifice that is a tribute to human creativity. The mathematic curriculum is designed to provide essential skills for students in a variety of disciplines and to provide mathematics majors with a deep understanding of mathematics as it has evolved over the past two thousand years and how it is practiced today.

There are two tracks in the major: Mathematics and Mathematics/Statistics (a double major is not allowed in the two tracks. Students choose from the same integrative exercise choices.

## Requirements for the Mathematics Track

The course requirements are Mathematics 101 or 111, 121, 211, 232, 236 and six advanced courses from among: Mathematics courses numbered above 236 and Computer Science 252, 254. Potential majors with especially strong preparation may petition the department for exemption from the Mathematics 232 and/or 236 requirement(s). Mathematics majors are strongly encouraged to take Computer Science 111, preferably during their first two years. Concepts and skills from Computer Science 111 can be particularly valuable in advanced mathematics courses.

At least three of the following five areas of mathematics must be represented by the six advanced courses.

Algebra: Mathematics 312, 332, 342, 352
Analysis: Mathematics 251, 321, 331, 351
Applied Mathematics: Mathematics 241, 245, 265, 275, 315, 341
Discrete Structures: Mathematics 333, Computer Science 252, 254
Geometry and Topology: Mathematics 244, 344, 354
In addition, each senior major must complete an integrative exercise which consists of a group research project. Majors are required to participate in the mathematical life of the department by attending colloquia, comps presentations, and other activities.

There are many patterns of courses for the major depending upon a student's mathematical interests and career goals. A guide for majors, which supplies information about suitable patterns of courses, is available on the Mathematics department web site. Those planning to attend graduate school should consider acquiring a reading knowledge of at least one of the following languages: French, German or Russian.

In order to meet State of Minnesota certification requirements, prospective secondary school teachers must take Mathematics 265, 275, 244 (recommended) or 344, and 349. A computer science course is also strongly recommended.

## Requirements for the Mathematics/Statistics Track

Mathematics 101 or $111,121,211,232,236,245,265,275,315$, plus two mathematics electives above 236, at least one of which must be taken outside of the Applied Mathematics area, and the Senior Integrative Exercise. CS 111 (Introduction to Computer Science) is also recommended. Students on this track are strongly encouraged to engage in some data analysis learning experience outside the classroom such as an internship involving data analysis, a research experience with a statistician, either on or off campus, or a comps project that is explicitly statistical in nature. Students interested in graduate school in statistics are advised to take Mathematics 321 (Real Analysis I).

Major under Combined Plan in Engineering (see Engineering in index):

In addition to completing requirements for the mathematics major listed above including Mathematics 241 and 341, the student should take the following courses required for admission to engineering schools: Two terms of 100-level Physics, Chemistry 123, 230, and Computer Science 111.

Mathematics Skills Center: This Center offers extra assistance to students in lower-level mathematics courses and other courses requiring basic mathematical skills.

## Mathematics Courses

101. Calculus with Problem Solving An introduction to the central ideas of calculus with review and practice of those skills needed for the continued study of calculus. Problem solving strategies will be emphasized. (Meets Monday through Friday). Not open to students who have received credit for Math 111.6 credits, MS; FSR, Fall-D. Haunsperger
102. Introduction to Mathematics This course is designed to provide an understanding of fundamental concepts, and examples of applications, of mathematics. It attempts to provide insights into the nature of mathematics and its relation to other branches of knowledge, and helps students develop skill in mathematical reasoning. No prerequisites. 6 credits, MS; FSR, Spring-M. Krusemeyer
103. Introduction to Calculus An introduction to the differential and integral calculus. Derivatives, antiderivatives, the definite integral, applications, and the fundamental theorem of calculus. Requires placement via the Calculus Placement Exam 1, see Mathematics web page. Not open to students who have received credit for Mathematics 101. 6 credits, MS; FSR, Fall, Winter, Spring-Staff
104. Statistics: Concepts and Applications Introduction to statistical concepts with emphasis on understanding and interpretation of statistical information, especially in the context of media reports and scholarly articles. Examples taken from a wide-range of areas such as public policy, health and medicine, and the social and natural sciences. Computationally less intensive than Math 215. Students will learn how to use statistical software. Topics include: Uncertainty and variability, statistical graphs, types of studies, correlation and linear regression, two-way tables, and inference. Not open to students who have already received credit for Math 211, Math 215 or Psychology 200/201. 6 credits, MS; FSR, QRE, Fall, Spring-L. Chihara, R. Dobrow
105. Calculus II Integration techniques, improper integrals, the calculus of the logarithmic, exponential and inverse trigonometric functions, applications, Taylor polynomials and infinite series. Prerequisite: Mathematics 101, 111 or placement via Calculus Placement Exam \#2. 6 credits, MS; FSR, Fall, Winter, Spring—Staff
106. A Tour of Mathematics A series of eight lectures intended for students considering a Mathematics major. The emphasis will be on presenting various striking ideas, concepts and results in modern mathematics, rather than on developing extensive knowledge or techniques in any particular subject area. 1 credits, $S / C R / N C$, MS; NE, Winter—Staff
107. Introduction to Multivariable Calculus Vectors, curves, partial derivatives, gradient, multiple and iterated integrals, line integrals, Green's theorem. Prerequisite: Mathematics 121 or placement via Calculus Placement Exam \#3. 6 credits, MS; FSR, Fall, Winter, Spring-Staff
108. Introduction to Statistics Introduction to statistics and data analysis. Practical aspects of statistics, including extensive use of statistical software, interpretation and communication of results, will be emphasized. Topics include: exploratory data analysis, correlation and linear regression, design of experiments, basic probability, the normal distribution, sampling distributions, estimation, hypothesis testing, and two-way tables. Not open to students who have already received credit for Math 115 or Math 275. Students who have received MS credit for Psychology 200/201 cannot receive MS credit for Math 215. Students who have taken Math 211 are encouraged to consider the more advanced Math 265275 probability-statistics sequence. 6 credits, MS, FSR, QRE, Fall, Winter, Spring—Staff
109. Linear Algebra Vector spaces, linear transformations, determinants, inner products and orthogonality, eigenvectors and eigenvalues; connections with multivariable calculus. Prerequisite: Mathematics 211. 6 credits, MS; FSR, Fall, Winter, Spring—Staff
110. Mathematical Structures Basic concepts and techniques used throughout mathematics. Topics include logic, mathematical induction and other methods of proof, problem solving, sets, cardinality, equivalence relations, functions and relations, and the axiom of choice. Other topics may include: algebraic structures, graph theory, and basic combinatorics. Prerequisite: Mathematics 232 or consent of the instructor. 6 credits, MS; FSR, Fall, Winter, Spring-D. Haunsperger, J. Goldfeather, M.

## Krusemeyer

241. Ordinary Differential Equations An introduction to ordinary differential equations, including techniques for finding solutions, conditions under which solutions exist, and some qualitative analysis. Prerequisites: Mathematics 232 or permission of the instructor. 6 credits, MS; FSR, Winter-S. Kennedy, M. Krusemeyer
242. Geometries Euclidean geometry from an advanced perspective; projective, hyperbolic, inversive, and/or other geometries. In addition to foundations, various topics such as transformation and convexity will be treated. Recommended for prospective secondary school teachers. Prerequisite: Mathematics 236. 6 credits, MS; FSR, Offered in alternate years, Not offered in 2010-2011
243. Applied Regression Analysis A second course in statistics covering simple linear regression, multiple regression and ANOVA, and logistic regression. Exploratory graphical methods, model building and model checking techniques will be emphasized with extensive use of statistical software to analyze real-life data. Prerequisites: Mathematics 215 (or equivalent) or 275.6 credits, $M S ; F S R, Q R E$, Spring-L. Chihara
244. Chaotic Dynamics An exploration of the behavior of non-linear dynamical systems. Topics include one-dimensional dynamics, Sarkovskii's Theorem, chaos, symbolic dynamics, fractals, Mandelbrot and Julia sets. Prerequisite: Mathematics 236 or consent of the instructor. 6 credits, MS; FSR, Offered in alternate years, Fall-S. Kennedy
245. Probability Introduction to probability and its applications. Topics include discrete probability, random variables, independence, joint and conditional distributions, expectation, limit laws and properties of common probability distributions. Prerequisite: Mathematics 211.6 credits, MS; FSR, Fall-L. Chihara, R. Dobrow
246. Introduction to Statistical Inference Introduction to mathematical statistics. The mathematics underlying fundamental statistical concepts will be covered as well as applications of these ideas to reallife data. Topics include: confidence intervals, hypothesis testing, parameter estimation, maximum likelihood, goodness of fit tests and regressions. A statistical software package will be used to analyze data sets. Prerequisite: Mathematics 265. 6 credits, MS; FSR, QRE, Winter-L. Chihara
247. Elementary Theory of Numbers Properties of the integers. Topics include the Euclidean algorithm, classical unsolved problems in number theory, prime factorization, Diophantine equations, congruences, divisibility, Euler's phi function and other multiplicative functions, primitive roots, and quadratic reciprocity. Other topics may include integers as sums of squares, continued fractions, distribution of primes, integers in extension fields, p-adic numbers. Prerequisite: Mathematics 236 or consent of the instructor. 6 credits, MS; FSR, Offered in alternate years, Winter-M. Krusemeyer
248. Topics in Probability \& Statistics: Introduction to Stochastic Processes Random walk, Markov chains, Poisson process, Brownian motion, with applications. Prerequisite: Mathematics 265. 6 credits, MS; FSR, Spring—K. St. Clair
249. Real Analysis I A systematic study of concepts basic to calculus, such as topology of the real
numbers, limits, differentiation, integration, convergence of sequences, and series of functions. Prerequisite: Mathematics 236 or consent of the instructor. 6 credits, MS; FSR, Fall-S. Kennedy
250. Real Analysis II Further topics in analysis such as measure theory, Lebesgue integration or Banach and Hilbert spaces. Prerequisite: Mathematics 321 or consent of the instructor. 6 credits, MS; FSR, Offered in alternate years, Winter-J. Armel
251. Advanced Linear Algebra Selected topics beyond the material of Mathematics 232. Topics may include the Cayley-Hamilton theorem, the spectral theorem, factorizations, canonical forms, determinant functions, estimation of eigenvalues, inner product spaces, dual vector spaces, unitary and Hermitian matrices, operators, infinite-dimensional spaces, and various applications. Prerequisite: Mathematics 236 or consent of the instructor. 6 credits, MS; FSR, Offered in alternate years, Not offered in 20102011
252. Combinatorial Theory The study of structures involving finite sets. Counting techniques, including generating functions, recurrence relations, and the inclusion-exclusion principle; existence criteria, including Ramsey's theorem and the pigeonhole principle. Some combinatorial identities and bijective proofs. Other topics may include graph and/or network theory, Hall's ("marriage") theorem, partitions, and hypergeometric series. Prerequisite: Mathematics 236 or permission of instructor. 6 credits, MS; FSR, Offered in alternate years, Fall-E. Egge
253. Fourier Series and Boundary Value Problems Fourier series and their applications to boundary value problems in partial differential equations. Topics include separation of variables, orthogonal sets of functions, representations of functions in series of orthogonal functions, Fourier transforms, and uniqueness of solutions. Prerequisite: Mathematics 241.6 credits, MS; FSR, Spring-S. Patterson
254. Abstract Algebra I Introduction to algebraic structures, including groups, rings, and fields. Homomorphisms and quotient structures, polynomials, unique factorization. Other topics may include applications such as Burnside's counting theorem, symmetry groups, polynomial equations, or geometric constructions. Prerequisite: Mathematics 236 or consent of the instructor. 6 credits, MS; FSR, Spring-

## J. Goldfeather

344. Differential Geometry Local and global theory of curves, Frenet formulas. Local theory of surfaces, normal curvature, geodesics, Gaussian and mean curvatures, Theorema Egregium. Riemannian geometry. Prerequisite: Mathematics 236 or consent of the instructor. 6 credits, MS; FSR, Offered in alternate years, Winter-S. Patterson
345. Methods of Teaching Mathematics Crosslisted with EDUC 350. Methods of teaching mathematics in grades 7-12. Issues in contemporary mathematics education. Regular visits to school classrooms and teaching a class are required. Prerequisite: Junior or senior standing and permission of the instructor. 6 credits, ND; NE, Spring-D. Haunsperger
346. Functions of a Complex Variable Algebra and geometry of complex numbers, analytic functions, complex integration, series, residues, applications. Prerequisite: Mathematics 211.6 credits, MS; FSR, Offered in alternate years, Not offered in 2010-2011
347. Abstract Algebra II An intensive study of one or more of the types of algebraic systems studied in Mathematics 342 . Prerequisite: Mathematics 342 or consent of the instructor. 6 credits, MS; FSR, Offered in alternate years, Not offered in 2010-2011
348. Topology An introduction to the topology of surfaces. We will cover basic point-set, geometric and algebraic topology. Topics include continuity, connectedness and compactness; triangulations and classification of surfaces; topological invariants (Euler characteristic); homology. Prerequisite: Mathematics 236. 6 credits, MS; FSR, Offered in alternate years, Not offered in 2010-2011
349. Seminar in Mathematics: Surfaces Selected topics in the topology and geometry of surfaces,
possibly including the classification theorem; the fundamental group and mapping class group of surfaces; gluing construction of surfaces from Euclidean, spherical and hyperbolic polygons; tessellations and their related quotient spaces. Prerequisite: Mathematics 321,344, or 354, or consent of the instructor. 6 credits, MS; FSR, Spring-H. Wong
350. Integrative Exercise A supervised small-group research project for senior mathematics majors. Required of all senior majors. Prerequisite: Mathematics 236 and successful completion of three courses from among: Mathematics courses numbered above 236, Computer Science 252, Computer Science 254. 3 credits, S/NC, ND; NE, Fall, Winter, Spring—Staff

## MEDIEVAL AND RENAISSANCE STUDIES CONCENTRATION

Directors: Associate Professors Victoria Morse and William North

The Medieval and Renaissance Studies Concentration encourages students interested in the cultures and kingdoms that flourished from Late Antiquity through the Renaissance to deepen their understanding of these periods through an interdisciplinary program of study. Heirs to ancient empires, the societies of Europe, Byzantium, and the Muslim world each offer fascinating opportunities to watch societies cope with timeless problems of power, identity, and belief. The concentration is open to students in ANY major who wish to expand their knowledge of this important and fascinating period of human history.

A total of 42 credits (usually 7 courses) is required for the concentration: 18 credits in "Core" courses, 18 credits in "Supporting" courses; and a capstone seminar. In addition to the seminars listed below, students may count--with prior approval of both the course instructor and the concentration coordinator's--other advanced seminars in which the concentrator's research focuses on a topic within the period covered by the concentration

Optional Off-Campus Programs: Off-campus study can be an important part of the concentration. Students interested in study abroad as part of the concentration are advised to consult with their academic advisers in deciding when to go off-campus and with the concentration coordinators to discuss the range of programs available and potential programs of study. Courses taken abroad may count for up to two "core" courses ( 12 credits) and two "supporting courses" ( 12 credits).

## Requirements for the Concentration

Core Courses ( 3 courses/18 credits required):
ARCN 246 Archaeological Methodology
ARTH 101 Introduction to Art History I
ARTH 155 Islamic Art and Architecture (Not offered in 2010-2011)
ARTH 234 Italian Renaissance Art (Not offered in 2010-2011)
CLAS 229 The Later Roman Empire, Byzantium and Islam
ENGL 114 Introduction to Medieval Narrative (Not offered in 2010-2011)
ENGL 201 Chaucer I: The Canterbury Tales
ENGL 210 Medieval and Renaissance English Literature
ENGL 244 Shakespeare I
ENGL 301 The Courtly Chaucer (Not offered in 2010-2011)
ENGL 309 Renaissance Selves (Not offered in 2010-2011)
ENGL 310 Shakespeare II
ENGL 313 Major Works of the English Renaissance: The Faerie Queene (Not offered in 20102011)

ENGL 314 Major Works of the English Renaissance: Paradise Lost (Not offered in 2010-2011)

FREN 351 Topics in Sixteenth Century Literature: Metamorphoses: Love, War and Monsters in Early Modern France (Not offered in 2010-2011)
HIST 130 The Formation of Christian Thought (Not offered in 2010-2011)
HIST 137 Before Europe: The Early Medieval World, 250-c. 1050 (Not offered in 2010-2011)
HIST 138 The Making of Europe
HIST 139 Foundations of Modern Europe (Not offered in 2010-2011)
HIST 204 Crusade, Contact and Exchange in the Medieval Mediterranean (Not offered in 20102011)

HIST 230 Institutional Structure and Culture in the Middle Ages (Not offered in 2010-2011)
HIST 232 Renaissance Worlds in France and Italy
HIST 233 Cultures of Empire: Byzantium, 710-1453
HIST 235 Dante's Italy (Not offered in 2010-2011)
HIST 236 Women's Lives in Pre-Modern Europe (Not offered in 2010-2011)
HIST 239 Britain, c. 1485-1834: From Sceptred Isle to Satanic Mills (Not offered in 2010-2011)
HIST 243 The Peasants are Revolting! Society and Politics in the Making of Modern France (Not offered in 2010-2011)
HIST 330 Gender, Ethics and Power in Medieval France (Not offered in 2010-2011)
LATN 241 Petronius and Apuleius (Not offered in 2010-2011)
LATN 243 Medieval Latin
MUSC 210 Medieval and Renaissance Music (Not offered in 2010-2011)
RELG 122 Introduction to Islam
RELG 163 The Qur'an (Not offered in 2010-2011)
RELG 231 From Luther to Kierkegaard
RELG 263 Sufism
SPAN 330 The Invention of the Modern Novel: Cervantes' Don Quijote
SPAN 331 Renaissance and Baroque

## Supporting Courses ( $\mathbf{1 8}$ credits required):

Note: all courses listed as "core courses" also qualify as "supporting courses."
ARBC 215 Readings in Medieval Arabic Anthologies (Not offered in 2010-2011)
ARBC 231 Classical Arabic Literature (adab) in the Making
ARCN 246 Archaeological Methodology
ARTH 155 Islamic Art and Architecture (Not offered in 2010-2011)
ARTH 170 Printmaking: The First Media Revolution (Not offered in 2010-2011)
ARTH 230 The Sistine Chapel (Not offered in 2010-2011)
ARTH 233 Van Eyck, Bosch, Bruegel: Their Visual Culture (Not offered in 2010-2011)
ARTH 238 Rembrandt, Vermeer and Netherlandish Art (Not offered in 2010-2011)
ARTH 251 Ruins and Romantics: English Gothic and Gothic-Revival Art and Architecture
ARTH 351 English Art and Architecture on Site
CLAS 229 The Later Roman Empire, Byzantium and Islam
ENGL 114 Introduction to Medieval Narrative (Not offered in 2010-2011)
ENGL 201 Chaucer I: The Canterbury Tales
ENGL 210 Medieval and Renaissance English Literature
ENGL 213 Christopher Marlowe
ENGL 244 Shakespeare I
ENGL 301 The Courtly Chaucer (Not offered in 2010-2011)
ENGL 310 Shakespeare II
ENGL 313 Major Works of the English Renaissance: The Faerie Queene (Not offered in 20102011)

ENGL 314 Major Works of the English Renaissance: Paradise Lost (Not offered in 2010-2011) EUST 110 Europe as Idea and Union

FREN 351 Topics in Sixteenth Century Literature: Metamorphoses: Love, War and Monsters in Early Modern France (Not offered in 2010-2011)
GERM 230 From Gutenberg to Gates: The History and Practice of Printing (Not offered in 20102011)

GERM 231 Damsels, Dwarfs, and Dragons: Medieval German Literature
HIST 100 Mapping the World
HIST 137 Before Europe: The Early Medieval World, 250-c. 1050 (Not offered in 2010-2011)
HIST 138 The Making of Europe
HIST 139 Foundations of Modern Europe (Not offered in 2010-2011)
HIST 204 Crusade, Contact and Exchange in the Medieval Mediterranean (Not offered in 20102011)

HIST 232 Renaissance Worlds in France and Italy
HIST 233 Cultures of Empire: Byzantium, 710-1453
HIST 235 Dante's Italy (Not offered in 2010-2011)
HIST 236 Women's Lives in Pre-Modern Europe (Not offered in 2010-2011)
HIST 238 The World of Bede (Not offered in 2010-2011)
HIST 238 Topics in Medieval History: Church, Papacy and Empire (Not offered in 2010-2011)
HIST 243 The Peasants are Revolting! Society and Politics in the Making of Modern France (Not offered in 2010-2011)
HIST 245 Ireland: The Origin of the Troubles (Not offered in 2010-2011)
HIST 330 Gender, Ethics and Power in Medieval France (Not offered in 2010-2011)
HIST 395 Controversial Histories: Conflict, Polemic, and Persuasion in Medieval and Modern Worlds
LATN 241 Petronius and Apuleius (Not offered in 2010-2011)
LATN 243 Medieval Latin
MUSC 210 Medieval and Renaissance Music (Not offered in 2010-2011)
POSC 250 Ancient Political Philosophy
POSC 254 Freedom, Excellence, Happiness: Aristotle's *Ethics*
RELG 122 Introduction to Islam
RELG 163 The Qur'an (Not offered in 2010-2011)
RELG 263 Sufism
RELG 287 Many Marys
SPAN 330 The Invention of the Modern Novel: Cervantes' Don Quijote
Capstone Seminars (one course required):
ARCN 395 Archaeology Capstone Seminar (Not offered in 2010-2011)
ENGL 309 Renaissance Selves (Not offered in 2010-2011)
FREN 351 Topics in Sixteenth Century Literature: Metamorphoses: Love, War and Monsters in Early Modern France (Not offered in 2010-2011)
HIST 330 Gender, Ethics and Power in Medieval France (Not offered in 2010-2011)
HIST 333 Iconoclasm (Not offered in 2010-2011)
HIST 395 Controversial Histories: Conflict, Polemic, and Persuasion in Medieval and Modern Worlds

## MIDDLE EASTERN LANGUAGES (MELA)

Chair: Associate Professor Stacy N. Beckwith
Associate Professor: Stacy N. Beckwith
Assistant Professor: Yaron Klein
Adjunct Instructor: Shadi Bayadsy

ACLS Post-doctoral Fellow: Maureen Jackson

The Department of Middle Eastern Languages offers introductory, intermediate, and advanced courses in Arabic and Hebrew language, and a variety of courses in classical and modern Arabic and modern Hebrew literature, mostly in English translation. We also offer courses in Ottoman, Turkish, and wider Jewish history and culture.

## Arabic Courses (ARBC)

101. Elementary Arabic This course sequence introduces non-Arabic speakers to the sounds, script, and basic grammar of Arabic-the language of 200 million speakers in the Arab world and the liturgical language of over a billion Muslims. Students will develop basic listening, speaking, reading and writing skills in Modern Standard Arabic. Classes will incorporate readings and audio-visual material from contemporary Arabic media, as well as popular music. 6 credits, ND; NE, Fall-Y. Klein
102. Elementary Arabic This course sequence introduces non-Arabic speakers to the sounds, script, and basic grammar of Arabic-the language of 200 million speakers in the Arab world and the liturgical language of over a billion Muslims. Students will develop basic listening, speaking, reading and writing skills in Modern Standard Arabic. Classes will incorporate readings and audio-visual material from contemporary Arabic media, as well as popular music. Prerequisite: Arabic 101 or equivalent. 6 credits, ND; NE, Winter—S. Bayadsy
103. Elementary Arabic This course sequence introduces non-Arabic speakers to the sounds, script, and basic grammar of Arabic-the language of 200 million speakers in the Arab world and the liturgical language of over a billion Muslims. Students will develop basic listening, speaking, reading and writing skills in Modern Standard Arabic. Classes will incorporate readings and audio-visual material from contemporary Arabic media, as well as popular music. Prerequisite: Arabic 102 or equivalent. 6 credits, ND; NE, Spring-S. Bayadsy
104. Intermediate Arabic In this course sequence students will continue to develop their reading, writing, listening and speaking skills, while building a solid foundation of Arabic grammar (morphology and syntax). Students will develop their ability to express ideas in Modern Standard Arabic by writing essays and preparing oral presentations. Classes will incorporate readings and audio-visual material from contemporary Arabic media, as well as popular music. Prerequisite: Arabic 103 or language placement test indication. 6 credits, ND; NE, Fall-Y. Klein
105. Intermediate Arabic In this course sequence students will continue to develop their reading, writing, listening and speaking skills, while building a solid foundation of Arabic grammar (morphology and syntax). Students will develop their ability to express ideas in Modern Standard Arabic by writing essays and preparing oral presentations. Classes will incorporate readings and audio-visual material from contemporary Arabic media, as well as popular music. Prerequisite: Arabic 204 or language placement test indication. 6 credits, ND; NE, Winter-Y. Klein
106. Readings in Medieval Arabic Anthologies The concept of $a d a b$ as the "liberal arts education" of the medieval Arab world presents itself most vividly in the "Adab anthology." In this genre, medieval Arab authors collected and classified the knowledge of their time, representing a variety of disciplines: literature (poetry, proverbs, historical-anecdotal material), religion (Qur'an, hadith, jurisprudence, theology), linguistics, as well as philosophy and the sciences. In the class we will read excerpts from the works of some of the major medieval anthology writers: Ibn Abd Rabbihi, Abu al-Faraj al-Isfahani, alNuwayri and al-Ibshihi. All readings are in Arabic. Prerequisite: Arabic 205 or equivalent. 6 credits, $A L$, RAD; LA, IS, Offered in alternate years, Not offered in 2010-2011
107. Contemporary Music in the Middle East: From Umm Kulthum to Nancy Ajram The Middle

East is the home of a great number of musical styles, genres and traditions. Regional, ideological, and cultural diversity, national identity, as well as cross-cultural encounters--all express themselves in music. In this class we will explore some of the various musical traditions in the Arab world, Turkey and Iran, from the beginning of the twentieth century to the present. Class discussions will involve readings (in English) and guided listening. No prior music knowledge is required. 6 credits, $A L, R A D ; L A, I S$, Not offered in 2010-2011
231. Classical Arabic Literature (adab) in the Making This introductory course to Classical Arabic Literature will focus on the emergence and formation of Medieval Arabic belles-lettres (adab). We will read excerpts from adab literature (in translation), and discuss the socio-historical forces and institutions that shaped it: the rise of the urban elite in Abba sid Baghdad, the patronage supporting scholars, the intellectual gatherings of scholars (the majlis), the book shop, as well as the introduction of paper. We will discuss which materials were admitted into adab, and which were left out (e.g.: A Thousand and One Nights). In translation. 6 credits, AL, RAD; LA, IS, Spring-Y. Klein
310. Advanced Media Arabic Readings of excerpts from the Arabic press and listening to news editions, commentaries and other radio and TV programs from across the Arab world. Emphasis is on vocabulary expansion, text comprehension strategies, and further development of reading and listening comprehension. Class includes oral discussions and regular written assignments in Arabic. Prerequisite: Arabic 205 or equivalent. 6 credits, AL, RAD; LA, IS, Offered in alternate years, Spring-Y. Klein

## Hebrew Courses (HEBR)

100. Personal and National Identity in Israeli and Palestinian Literature In this course we will study the role played by prose fiction in filling the daily outlook of Israeli Jews, and Palestinians living in Lebanon, West Bank - Gaza and inside Israel, with distinct impressions and memories of "home." We will focus on pictures of the land, one's self and others that emerge from a selection of short stories, novels, and excerpts by Israeli and Palestinian authors of both genders, from 1948 to the present. We will also incorporate a number of films and documentaries that confront questions of identity and coexistence from Israeli Jewish and Palestinian perspectives. 6 credits, AI, WR1, Fall—S. Beckwith
101. Elementary Modern Hebrew Think beyond the Bible! Modern Hebrew is a vital language in several fields from religion and history to international relations and the sciences. This course is for students with no previous knowledge of Modern Hebrew or whose test scores indicate that this is an appropriate level of placement. We continually integrate listening, speaking, reading, and writing in Hebrew, incorporating materials from the Israeli internet and films into level appropriate class activities and assignments. 6 credits, ND; NE, Winter-S. Bayadsy
102. Elementary Modern Hebrew This course is for students who have completed Hebrew 101 or whose test scores indicate that this is an appropriate level of placement. We continue expanding our vocabulary and grammar knowledge, integrating listening, speaking, reading, and writing in Hebrew. We also continue working with Israeli films and internet, particularly for a Karaoke in Hebrew group project which involves learning and performing an Israeli pop song and researching the artists' background and messages for a class presentation. Prerequisite: Hebrew 101 or equivalent. 6 credits, ND; NE, Spring-S. Bayadsy
103. Elementary Modern Hebrew This course is for students who have completed Hebrew 102 or whose test scores indicate that this is an appropriate level of placement. We continue expanding our vocabulary and grammar knowledge, integrating listening, speaking, reading, and writing in Hebrew. We also continue working with Israeli films and internet, particularly to publish in-class magazines in Hebrew on topics related to Israel, the Middle East, and Judaic Studies. Prerequisite: Hebrew 102 or equivalent. 6 credits, ND; NE, Fall-S. Beckwith
104. Intermediate Modern Hebrew In this course students will strengthen the command of modern conversational, literary and newspaper Hebrew. As in the elementary sequence, we will continually integrate listening, speaking, reading, and writing in Hebrew. Popular Israeli music, broadcasts, internet sources, and films will complement the course's goals. Class projects include a term long research paper on a topic related to Israel, the Middle East, or Judaic Studies. Students will create a poster in Hebrew to illustrate their research. They will discuss this with other Hebrew speakers on campus at a class poster session toward the end of the course. 6 credits, ND; NE, Winter-S. Beckwith
105. Israeli Literature in the Middle East Since it began to develop in the early twentieth century, Israeli literature has encompassed diverse reflections of Middle Eastern landscapes and lifestyles. Such images range from typecast to groundbreaking, depending on authors' personal experiences, sociocultural inclinations, and attitudes toward what makes Israel a nation. We will examine tensions and synergies between Western and Eastern elements in Hebrew fiction by authors of European and Middle Eastern Jewish backgrounds circa Israeli independence in 1948, and by diverse second and third generation writers since then. We will also include some Israeli-Palestinian fiction. In translation; some coursework in Hebrew for advanced students. 6 credits, $A L, W R, R A D ; L A, W R 2, I S$, Offered in alternate years, Winter-S. Beckwith
106. Discovering Literary Tel Aviv and Jerusalem This course delves into Israel's two major cities, comparing their history and character. How are Tel Aviv's founding Zionist ideals and the Middle Eastern realities that challenged them portrayed in Hebrew literature? Our literary and cultural studies engagement with Tel Aviv will prepare students for our similar exploration of Jerusalem with its much longer multicultural history. How have places in both cities inspired literary reflections on national identity and memory? How have Israeli authors reciprocally influenced people's views of these urban spaces and their national resonance? This course is part of the OCS Winter Break program, which involves two linked classes in fall and winter terms; this class is the first class in the sequence. In translation. 6 credits, AL, WR; LA, WR2, IS, Not offered in 2010-2011
107. Faith and Fiction: Exploring Israeli National Identity This course is the second part of a twoterm sequence begining with Hebrew 222. Israel research on-site in Tel Aviv and Jerusalem during winter break. It is anticipated that research projects will be shared in a public symposium at the end of the term. Prerequisite: Hebrew 222 or Religion 222. 6 credits, AL; LA, IS, Not offered in 2010-2011
108. Israel in A. B. Yehoshua's Literature Since 1962 A.B. Yehoshua has been one of Israel's most prolific, politically engaged, and internationally significant authors. A combination of Middle Eastern and Sephardic (medieval Spanish) Jewish family roots and a Western Zionist education has fueled provocative literary interpretations of the Jewish State's historical origins and many internal fault lines. We will examine Yehoshua's portrayals of Jewish ethnic and religious diversity and of Zionist national consciousness in medieval through modern Mediterranean and European contexts pre-1948. We will then view Israel's domestic East/ West, Jewish/ Palestinian, and religious/ secular divides through an artistic lens of exceptional, debatable historical scope. In English translation. 6 credits, $A L, W R, R A D$; LA, WR2, IS, Not offered in 2010-2011

## Middle Eastern Language Courses (MELA)

230. Jewish Collective Memory Judaism emphasizes transmitting memory from one generation to the next. How have pivotal events and experiences in Jewish history lived on in Jewish collective memory? How do they continue to speak through artistic/ literary composition and museum/ memorial design? How does Jewish collective memory compare with recorded Jewish history? We will study turning points in Jewish history including the Exodus from Egypt, Jewish expulsion from medieval Spain, the Holocaust, and Israeli independence, as Jews in different times and places have interpreted them with lasting influence. Research includes work with print, film, and other visual/ performative media. 6
credits, HU, RAD; HI, IS, Spring—S. Beckwith
231. Turkey Today: An Introduction We will explore contemporary cultural and political issues in Turkey through investigating their historical context. Current topics as Turkey's bid to the European Union, the banning of the headscarf in public institutions, and the assertion of minority rights raise questions that we can explore more fully through historical understanding. How do we define 'Europe,' and what is the nature of historical interchange between Europe and the Ottoman empire and Turkey? What is the historical legal basis for disallowing the headscarf in Turkish and French public schools? From current issues we will work backwards toward fuller historical understanding of the present. 6 credits, HU, RAD; HI, IS, Fall-M. Jackson
232. Ottoman-Turkish History Through Music Through exploring music in the Ottoman empire and Turkey we can learn about multiethnic diversity and social relations, imperial court culture, leisure activity, European interchange, and twentieth century nation-building. In this class we will engage with the intersection between musical and historical studies in order to probe such topics as palace patronage of the arts, the Mevlevi ("whirling dervishes') and their place in court and urban life, minority and women composers of the palace; and artistic cross-currents between Ottomans and Europeans. Topics in Turkish musical culture include the impact of new technologies and debates about appropriate national arts. 6 credits, HU, RAD; HI, IS, Winter-M. Jackson
233. Ethnographies of Turkey This course will focus on anthropological perspectives on Turkey, aiming to expand our interdisciplinary understanding of the region. We will learn about the history of anthropological research in general and in Turkey in particular, as well as the changing concept of "culture." Diverse ethnographic themes include gender, religion, labor, and the arts. Historical ethnographies will assist us in understanding the past in the present, as well as communities such as religious (Muslim and non-Muslim) minorities who may be less visible in the textual historical record. Ethnographic scholarship from other parts of the Middle East will provide comparative perspectives. 6 credits, HU, RAD; HI, IS, Spring-M. Jackson

## MUSIC (MUSC)

Chair: Professor Hector L. Valdivia
Professors: Lawrence L. Archbold, Lawrence E. Burnett, Stephen K. Kelly, Justin M. London, Ronald W. Rodman, Melinda Russell, Hector L. Valdivia

Associate Professor: Nicola Melville
Assistant Professor: Alexander Freeman
Visiting Instructor: Mary Ellen Childs
Senior Lecturers: Benjamin Allen, Jackson Bryce, Lynn Deichert, John Ellinger, Elizabeth M. Ericksen, Janean Hall, Mary Budd Horozaniecki, Kenneth Huber, Merilee I. Klemp, Mark Krusemeyer, Mary Boyd Martz, Elinor Niemisto, Nina Olsen, Rick Penning, David Saunders, David Singley, David Whetstone, Marcia R. Widman

Lecturers: Gwen Anderson, Laura Caviani, Kevin Clements, Gao Hong, Martha Jamsa, Jay L. Johnson, Patricia Kent, Constance K. Martin, Thomas Rosenberg

Adjunct Instructors: Mark Kreitzer, Matthew McCright

## General Information

The Department of Music at Carleton College enrolls several hundred students every term, both majors and non-majors, in a curriculum that offers a balanced, integrated approach to the areas of performance, composition, theory, history, and ethnomusicology. Though students arrive at Carleton with a wide range of musical background and ability, all are encouraged to broaden, deepen, enrich and improve their engagement with music. In addition to music-making experiences in our performing
ensembles and private lessons, the Department offers an array of classroom courses that range from those designed specifically for the introductory level student to advanced seminars for majors.

## Courses in Applied Music

Beginning with the 2010-2011 academic year, there are two registration options for nine halfhour lessons (the 100-level courses) or nine hour lessons (the 200-level courses):

First option: a one-credit course (100-level) or a two-credit course (200-level) that will be mandatory $\mathrm{S} / \mathrm{CR} / \mathrm{NC}$ and will not fulfill the Arts Practice requirement, but will fulfill the Arts and Literature requirement.

Second option: a one-credit course (100-level) or a two-credit course (200-level) that will carry a " J " designation and include a jury experience at the end of the term. This type of course will be graded, though students can elect to take it $\mathrm{S} / \mathrm{CR} / \mathrm{NC}$, in which case, the credits count toward their maximum allowed. This second option will fulfill both the Arts Practice requirement and the Arts and Literature requirement.

All students regardless of major may study an instrument or voice at beginning through advanced levels, and may participate in the Department's musical ensembles by placement or audition. Registration for applied music lessons must be included in the student's official registration. The comprehensive fee does not include the cost of private instruction, and special fees are charged as described elsewhere. Fees are not refundable for late drops except when a late drop is made for medical reasons or in similar emergency situations. In such cases, the student must consult with the Music Department.

In the following listing, Music 150-184, 285, and 385 are for one credit, Music 250-284, 286, 299 and 386 are for two credits. Permission of the instructor is required for registration for two credits.

## Requirements for a Major

The goal of the major in Music at Carleton is to give students grounding in all aspects of the study of music: performance, composition, theory, history, and ethnomusicology. In addition to excellent preparation for graduate study in any of these fields, successful completion of the major provides a basic musical competency, enriches students' other coursework at the College, and enhances their experiences in applied studies.

Students intending to major in music should consult with the Music Major Adviser, Professor Lawrence Archbold, early in their college career since the theory and history courses follow one another in a preferred sequence. 72 credits are required for a major in music. Courses offered for a grade must be taken for a grade to apply to the major: i.e., courses cannot be taken S/CR/NC. All majors must take the following core courses:

18 credits: Music Theory (Music 200, 201, 202)
12 credits: Music History (Music 211, 312)
6 credits: Ethnomusicology (Music 140, 141, 243, 245, 246, 247 or 248, AMST 396)
6 credits: Composition (Music 220; 285/286 cannot substitute for 220)
6 credits: Music of the Twentieth-Century I/II (Music 203/303)
2 credits: Senior Colloquium (Music 398)
4 credits: Integrative Exercise (Music 400)
8 credits: Private Lessons, of which at least 4 credits are taken from Music 385 or 386. Music 299 may be taken in lieu of two credits of 385 or 386.

4 credits: Ensemble Participation (Music 185 through 195), of which at least two credits are in one of the following conducted ensembles: 185, 186, 187, 189, 190

6 credits: Music Electives (from any Music course).

## Performance Requirement

Every music major must, at least on one occasion, give a public performance of a piece worked on with one of the major's applied music instructors. This performance must be a solo, not a group,
performance and might take place during a studio recital or common time recital, a junior or senior solo recital, or some other event sponsored by the Music Department.

## Music Courses

100. Musical Cultures of the Caribbean This course will introduce musical cultures of a number of Caribbean nations, usually including Cuba, the Dominican Republic, Haiti, Jamaica, Puerto Rico, Trinidad, and the French Antilles. Folk, sacred, and popular genres will be examined. While each island has unique and varied traditions, a number of themes relevant to Caribbean ethnomusicology will underlie each unit and tie them together. These include issues of acculturation, race, class, politics, nationalism, and globalization, and how these issues shape and are shaped by musical practices. Students will gain skills in critical reading, scholarly writing, and oral presentation. No musical experience is necessary. 6 credits, AI, WR1, IS, Fall—M. Russell
101. Music Fundamentals A course designed for students with minimal or no music background as preparation for other music courses and/or applied music study. The course covers the fundamentals of music including note reading in treble and bass clefs, rhythms, meter, scales, intervals, key signatures, chords, basic harmony and musical forms. The class will make regular use of the music computer lab for assignments. 3 credits, AL; ARP, Spring-J. Ellinger
102. Basic Musicianship This course will enable students to develop proficiency in aural and music reading skills. Open to all students, but especially recommended for students who are considering a major in music or enrolling in voice lessons and choir. 3 credits, AL; ARP, Fall-L. Burnett
103. Introduction to Music Technology A course designed to use the computer as a musical instrument. Studying the low level details of the MIDI language, standard MIDI files, MIDI sequencing and digital audio techniques, projects will focus on getting the computer to play music expressively, with all the nuances of a human performance: rhythm, dynamics, articulation, and tempo; producing original arrangements of music written in Excel spreadsheets using the raw MIDI language and then rendered on the computer as standard MIDI files; and will involve the musical realization of an original musical score or arrangement from notation to MIDI to digital audio to effects processing and mastering on an audio CD. The class will make use of the music computer lab for projects. Open to all students with an interest in music or computers. Prerequisite: Ability to read music. 6 credits, AL; ARP, WinterJ. Ellinger
104. This course will provide a brief introduction to music theory concepts relevant to eighteenth- and nineteenth-century western art music and utilize that knowledge to better understand the music of the Three B's: Bach, Beethoven, and Brahms. Prerequisite: the ability to read music. 6 credits, AL; LA, Not offered in 2010-2011
105. Western Art Music and Western Civilization An introduction to the history of western art music from the Middle Ages to the present. The emphasis is on the various styles of the western tradition (Medieval, Renaissance, Baroque, Classical, Romantic, and Modern) and their relationships with other aspects of European and Euro-American high culture. Representative compositions from each of these periods will be studied through reading and guided listening. No prerequisite: the ability to read music is not necessary. 6 credits, AL, WR; LA, WR2, Winter-L. Archbold
106. Music and Film This course explores the history and development of film music along with theories of how music contributes to the meaning of moving images and narrative scenes. The primary focus of the course will be on film music in the United States, but notable film scores from Europe and Asia will also be discussed. The film music history covers historical periods from the pre-cinematic Vaudeville era through the postmodern films of the early twenty-first century. Cross-cutting this chronological history will be discussion of film musicals as a separate genre. Ability to read music not
required. 6 credits, $A L$, WR; $L A, W R 2$, IDS, Winter-R. Rodman
107. Introduction to Composition Two class meetings and one individual session per week. In contrast to Music 220, this class does not require a background in music theory. It is designed for the person who has an interest in exploring the process of writing music. Class meetings will introduce techniques of composition and present structured exercises. Individual sessions will focus on the student's own projects. Class assignments will involve the opportunity to use computer/midi/synthesizer technologies. Prerequisite: the ability to read music. 6 credits, $S / C R / N C$, $A L$; ARP, Not offered in 2010-2011
108. Introduction to Opera A survey of opera and its history with special emphasis on four major works, one each by Mozart, Bizet, Wagner, and Stravinsky. Operas will be studied through video presentation, listening, and readings. Librettos available in translation; ability to read music not required. 6 credits, AL, WR; LA, WR2, Spring-L. Archbold
109. Songs from Beethoven to Ben Folds This course will provide an overview of the song cycle genre from its beginning up to and including some popular albums. Our goal is to enhance listening and analytical skills through reading and listening assignments, in-class discussions, and analyses. Ability to read music not required. 6 credits, $A L, W R ; L A, W R 2$, Not offered in 2010-2011
110. Symphonies from Mozart to Mahler A survey of orchestral symphonies and related genres from the late eighteenth through the late nineteenth centuries with emphasis on the works of Mozart, Beethoven, Berlioz, Schubert, Schumann, Brahms, Mahler, and others. Symphonies will be studied through listening and readings; connections to other aspects of nineteenth-century European culture will be explored. Ability to read music not required. 6 credits, $A L, W R ; L A, W R 2$, Spring-L. Archbold
111. Survey of Piano Music A survey of the changing styles, forms, and performance practices in solo piano music from the eighteenth century to the present. Emphasis will be on the development of compositional and performance practices through studying composers and performers of keyboard music. Prerequisite: the ability to read piano scores. 2 credits, AL; LA, Not offered in 2010-2011
112. The Piano: Uses and Abuses From the royal courtrooms of eighteenth-century Europe, through the rise of the bourgeoisie, to controversial and conceptual art of the twentieth century, the piano is inextricably linked to the important compositional and social trends of western music over the last three hundred years. It is at the center of social intercourse in the nineteenth century; it is the target of humor, destruction and abuse in film, pop music and performance art of the twentieth century. This class will examine the people, music, and cultural trends that have made the piano such a ubiquitous and central figure in music history. 6 credits, $A L$; LA, Not offered in 2010-2011
113. Conducting The course covers the fundamentals of conducting such as beat patterns, baton technique, score reading, cueing, fermatas, and releases. The class will function as an ensemble, and each student will conduct short assignments once each week, or as frequently as possible. Near the end of the term each student will form a small volunteer ensemble for a final conducting project.
Prerequisite: ability to read music and active participation in a major faculty-coached ensemble, or permission of the instructor. 2 credits, AL; ARP, Fall-L. Burnett
114. The History of Jazz A survey of jazz from its beginnings to the present day focusing on the performer/composers and their music. No prerequisite. 6 credits, AL, WR; LA, WR2, IDS, Fall, WinterS. Kelly
115. The Blues From the Delta to Chicago A history of the Delta blues and its influence on later blues and popular music styles, tracing its movement from the Mississippi Delta in the 1920s to Chess Records and the Chicago Blues of the 1940s and 50s (especially Howlin' Wolf and Muddy Waters). Music and musicians discussed will include the classic blues singers of the 1920s, early country music (Jimmie Rodgers), and the legacy of Robert Johnson. Issues of authenticity and "ownership" of both the music and its cultural legacy will also be discussed. The course involves readings, listening assignments,
and some transcriptions of early recorded blues. No prerequisite, although the ability to read music is helpful. 6 credits, AL; LA, IDS, Spring-J. London
116. Spiritual Hymns and Gospel Music: Aspects of African-American Music Traditions The survey of African-American hymns, spirituals and gospel music in the worship service and on the concert stage. The course of study will place the music and its creators within the historical, social, and cultural contexts of life in the United States, from the earliest days to the present. This framework will provide an appreciation for how the music tells the story of African-Americans, how the music affects audiences throughout the world, and how the traditions influence other musical expressions. The approach of the study is performance based with particular attention to the simularities and differences of musical forms, styles and performance practices of western art music. No prerequisite. 6 credits, $A L$, WR, RAD; LA, WR2, IDS, Not offered in 2010-2011
117. Introduction to World Music I A survey of the world's musical traditions, usually including areas of Africa, Indonesia, the Middle East, Europe, and China. Both traditional and popular music will be considered, with emphasis on developing listening skills, and on understanding relationships between musical cultures, roles of music in social life, and varieties of change in musical style and practice. Ability to read music is not necessary. No prerequisite. 6 credits, $A L, W R, R A D ; L A, W R 2, I S, N o t$ offered in 2010-2011
118. Introduction to World Music II A survey of the world's musical traditions, usually including music of India, Japan, native and transplanted traditions in North and South America, and selected European traditions. Both traditional and popular music will be considered, with emphasis on developing listening skills, and on understanding relationships between musical cultures, roles of music in social life, and varieties of change in musical style and practice. Ability to read music is not necessary. No prerequisite. 6 credits, $A L$, WR, RAD; LA, WR2, IS, Not offered in 2010-2011
119. Latin American Popular Music Examines Latin American popular musics within their social, political and cultural contexts. Genres include tango, samba, vallenato, nueva canción, tropicália, rock nacional and funk carioca; themes include music and the nation, music and dictatorship, the crisis of cultural inclusion and exclusion in contemporary Latin America. Understanding how these musics are framed by broader assumptions regarding race, class, gender and ethnicity at multiple levels will be a key concern. Our focused listening will be complemented with analytical, critical and contextual readings, including relevant selections from Latin American literature in translation and occasional film screening. No musical experience is required. 6 credits, $A L$, WR, RAD; LA, WR2, IS, Not offered in 2010-2011
120. Piano Applied study on the instrument, with attention to both musical and technical development. Students will study appropriate works from the Baroque, Classical, Romantic, and Modern periods, with special reference to a composer's individual notation, technical challenges and stylistic interpretation. 1 credits, S/CR/NC, AL; NE, Fall, Winter, Spring—K. Huber, M. McCright, N. Melville, M. Widman
150J. Piano (Juried) Applied study on the instrument, with attention to both musical and technical development. Students will study appropriate works from the Baroque, Classical, Romantic, and Modern periods, with special reference to a composer's individual notation, technical challenges and stylistic interpretation. 1 credits, AL; ARP, Fall, Winter, Spring-K. Huber, M. McCright, N. Melville, M. Widman
121. Voice A study of voice production, breathing, tone development, diction, and pronunciation. Selection (according to the individual voice) of Italian, German, French, and English songs of the Classic, Romantic, and Modern periods. Arias and songs from operas, oratorios, musical theater and popular songs from Western and non-Western traditions. In addition, one studio class per week. I credits, S/CR/NC, AL; NE, Fall, Winter, Spring—B. Allen, L. Burnett, P. Kent, M. Martz, R. Penning

151J. Voice (Juried) A study of voice production, breathing, tone development, diction, and pronunciation. Selection (according to the individual voice) of Italian, German, French, and English songs of the Classic, Romantic, and Modern periods. Arias and songs from operas, oratorios, musical theater and popular songs from Western and non-Western traditions. In addition, one studio class per week. 1 credits, AL; ARP, Fall, Winter, Spring-B. Allen, L. Burnett, P. Kent, M. Martz, R. Penning
152. Guitar Studies for the development of technique appropriate to the needs of the student. Music is chosen from all musical periods including folk picking, blues, ragtime, popular and classical styles. Students with no prior experience or lessons should take one term of class guitar (Music 197). 1 credits, S/CR/NC, AL; NE, Fall, Winter, Spring-J. Ellinger

152J. Guitar (Juried) Studies for the development of technique appropriate to the needs of the student. Music is chosen from all musical periods including folk picking, blues, ragtime, popular and classical styles. Students with no prior experience or lessons should take one term of class guitar (Music 197). 1 credits, AL; ARP, Fall, Winter, Spring-J. Ellinger
155. Violin 1 credits, S/CR/NC, AL; NE, Fall, Winter, Spring-E. Ericksen, M. Horozaniecki, H. Valdivia

155J. Violin (Juried) 1 credits, AL; ARP, Not offered in 2010-2011—E. Ericksen, M. Horozaniecki, H. Valdivia
156. Viola 1 credits, $S / C R / N C$, $A L$; $N E$, Fall, Winter, Spring—E. Ericksen, M. Horozaniecki, H. Valdivia

156J. Viola (Juried) 1 credits, AL; ARP, Fall, Winter, Spring—E. Ericksen, M. Horozaniecki, H. Valdivia
157. Cello 1 credits, S/CR/NC, AL; NE, Fall, Winter, Spring—T. Rosenberg

157J. Cello (Juried) 1 credits, AL; ARP, Fall, Winter, Spring—T. Rosenberg
158. Double Bass 1 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring-C. Martin

158J. Double Bass (Juried) 1 credits, $A L$; ARP, Fall, Winter, Spring-C. Martin
159. Flute 1 credits, $S / C R / N C, A L$; $N E$, Fall, Winter, Spring—M. Jamsa

159J. Flute (Juried) 1 credits, AL; ARP, Fall, Winter, Spring—M. Jamsa
160-01. Oboe 1 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring—M. Klemp
160-02. English Horn 1 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring—M. Klemp
160J-01. Oboe (Juried) 1 credits, AL; ARP, Fall, Winter, Spring—M. Klemp
160J-02. English Horn (Juried) 1 credits, AL; ARP, Fall, Winter, Spring—M. Klemp
161. Clarinet 1 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring—N. Olsen

161J. Clarinet (Juried) 1 credits, AL; ARP, Fall, Winter, Spring—N. Olsen
162. Saxophone 1 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring—D. Saunders

162J. Saxophone (Juried) 1 credits, $A L$; ARP, Fall, Winter, Spring—D. Saunders
163. Bassoon 1 credits, $S / C R / N C, A L$; $N E$, Fall, Winter, Spring—J. Bryce

163J. Bassoon (Juried) 1 credits, AL; ARP, Fall, Winter, Spring-J. Bryce
164. French Horn 1 credits, $S / C R / N C$, $A L$; $N E$, Fall, Winter, Spring-G. Anderson

164J. French Horn (Juried) 1 credits, AL; ARP, Fall, Winter, Spring-G. Anderson
165. Trumpet 1 credits, $S / C R / N C, A L$; $N E$, Fall, Winter, Spring—L. Deichert

165J. Trumpet (Juried) 1 credits, AL; ARP, Fall, Winter, Spring—L. Deichert
166-01. Trombone 1 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring—R. Rodman
166-02. Euphonium 1 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring—R. Rodman
166J-01. Trombone (Juried) 1 credits, AL; ARP, Fall, Winter, Spring-R. Rodman
166J-02. Euphonium (Juried) 1 credits, AL; ARP, Fall, Winter, Spring—R. Rodman
167. Tuba 1 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring—R. Rodman

167J. Tuba (Juried) 1 credits, AL; ARP, Offered in alternate years, Fall, Winter, Spring—R. Rodman
168. Orchestral Percussion Instruction on orchestral percussion instruments such as snare drum, mallets, and tympani. Equipment available for registered students. 1 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring—J. Johnson

168J. Orchestral Percussion (Juried) Instruction on orchestral percussion instruments such as snare drum, mallets, and tympani. Equipment available for registered students. 1 credits, AL; ARP, Fall, Winter, Spring-J. Johnson
169. Harp Studies to develop technique and a varied selection of works from the Renaissance and Baroque periods. Works from the Romantic and Modern periods are also studied. 1 credits, $S / C R / N C$, AL; NE, Fall, Winter, Spring-E. Niemisto
169J. Harp (Juried) Studies to develop technique and a varied selection of works from the Renaissance and Baroque periods. Works from the Romantic and Modern periods are also studied. 1 credits, $A L$; ARP, Fall, Winter, Spring-E. Niemisto
170. Harpsichord 1 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring-J. Hall

170J. Harpsicord (Juried) 1 credits, AL; ARP, Fall, Winter, Spring—J. Hall
171. Organ Basic piano skills required. 1 credits, $S / C R / N C$, $A L$; NE, Fall, Winter, Spring— $\boldsymbol{L}$. Archbold, J. Hall

171J. Organ (Juried) Basic piano skills required. 1 credits, AL; ARP, Fall, Winter, Spring—L. Archbold, J. Hall
174. Recorder 1 credits, $S / C R / N C$, $A L$; NE, Fall, Winter, Spring—M. Krusemeyer

174J. Recorder (Juried) 1 credits, AL; ARP, Fall, Winter, Spring—M. Krusemeyer
175. Jazz Piano Study the tools for learning the jazz "language." Learn to improvise through scale and mode study, transcription, and composition. Turn chord symbols into chord voicings and accompaniment. Explore the blues, jazz "standards," and today's music. Three years piano required. Materials: staff paper and portable tape player. 1 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring-L. Caviani

175J. Jazz Piano (Juried) Study the tools for learning the jazz "language." Learn to improvise through scale and mode study, transcription, and composition. Turn chord symbols into chord voicings and accompaniment. Explore the blues, jazz "standards," and today's music. Three years piano required. Materials: staff paper and portable tape player. 1 credits, AL; ARP, Fall, Winter, Spring-L. Caviani
176. Jazz Double Bass Instruction in Jazz Double Bass technique and theory. 1 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring-K. Clements

176J. Jazz Double Bass (Juried) Instruction in Jazz Double Bass technique and theory. 1 credits, $A L$;

ARP, Fall, Winter, Spring-K. Clements
177. Jazz and Blues Guitar Study of chord voicings, accompanimental techniques, and solo guitar performance in the jazz idiom. Prerequisites: previous study of guitar and the ability to read music, or the permission of the instructor. Students must provide their own instruments. 1 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring-D. Singley

177J. Jazz and Blues Guitar (Juried) Study of chord voicings, accompanimental techniques, and solo guitar performance in the jazz idiom. Prerequisites: previous study of guitar and the ability to read music, or the permission of the instructor. Students must provide their own instruments. 1 credits, $A L$; ARP, Fall, Winter, Spring-D. Singley
178. Drum Set Instruction Drum Set Instruction on/in jazz and popular drumming styles which use the standard drum set. Equipment available for registered students. 1 credits, $S / C R / N C, A L$; $N E$, Fall, Winter, Spring-J. Johnson
178J. Drum Set Instruction (Juried) Drum Set Instruction on/in jazz and popular drumming styles which use the standard drum set. Equipment available for registered students. 1 credits, AL; ARP, Fall, Winter, Spring-J. Johnson
179. Jazz Improvisation The study of the basic grammar and syntax of jazz improvisation styles, including transcribing solos, chord/scale materials and melodic patterns. 1 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring-Staff

179J. Jazz Improvisation (Juried) The study of the basic grammar and syntax of jazz improvisation styles, including transcribing solos, chord/scale materials and melodic patterns. 1 credits, AL; ARP, Fall, Winter, Spring—Staff
180. Raga: Vocal or Instrumental Study of Hindustani Music Beginning, intermediate, and advanced students of voice, guitar, violin, flute, clarinet, etc., approach raga from their current level of musicianship. In all cases, traditional practical instruction is complemented by some theoretical and philosophical exploration of the underpinnings of the music. 1 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring-D. Whetstone
180J. Raga: Vocal or Instrumental Study of Hindustani Music Beginning, intermediate, and advanced students of voice, guitar, violin, flute, clarinet, etc., approach raga from their current level of musicianship. In all cases, traditional practical instruction is complemented by some theoretical and philosophical exploration of the underpinnings of the music. 1 credits, AL; ARP, Fall, Winter, SpringD. Whetstone
181. Sitar Beginning through advanced study of sitar in the gayaki ang style of Ustad Vilayat Khan. Previous musical experience is not necessary. Sitars are provided. 1 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring-D. Whetstone

181J. Sitar (Juried) Beginning through advanced study of sitar in the gayaki ang style of Ustad Vilayat Khan. Previous musical experience is not necessary. Sitars are provided. 1 credits, AL; ARP, Fall, Winter, Spring-D. Whetstone
182. Chinese Musical Instruments Beginning through advanced study on traditional Chinese instruments, pipa (Chinese lute), erhu (Chinese violin), guzheng (Chinese zither), zhongruan (Chinese moon guitar), hulusi, bawu and dizi (Chinese bamboo flutes). 1 credits, $S / C R / N C$, $A L$; NE, Fall, Winter, Spring-G. Hong

182J. Chinese Musical Instruments (Juried) Beginning through advanced study on traditional Chinese instruments, pipa (Chinese lute), erhu (Chinese violin), guzheng (Chinese zither), zhongruan (Chinese moon guitar), hulusi, bawu and dizi (Chinese bamboo flutes). 1 credits, AL; ARP, Fall, Winter, Spring-

## G. Hong

183. Ethnic Drumming Instruction Ethnic drumming instruction in various ethnic drumming styles including West African (Ghanian instruments), Cuban (congas), North Indian (tabla) and Middle Eastern (dumbek). Equipment available for registered students. 1 credits, $S / C R / N C$, $A L$; NE, Fall, Winter, Spring—J. Johnson

183J. Ethnic Drumming Instruction (Juried) Ethnic drumming instruction in various ethnic drumming styles including West African (Ghanian instruments), Cuban (congas), North Indian (tabla) and Middle Eastern (dumbek). Equipment available for registered students. 1 credits, AL; ARP, Fall, Winter, Spring-J. Johnson
184. American Folk Instruments Beginning to advanced study of technique and improvisational styles on American folk instruments. Students may study 5 -string banjo (bluegrass or clawhammer style), bluegrass guitar, resonator guitar, fiddle (violin, viola, cello), bass, mandolin, mandola or mandocello. Students must provide their own instruments. 1 credits, $S / C R / N C, A L ; ~ N E$, Fall, Winter, Spring-M. Kreitzer

184J. American Folk Instruments (Juried) Beginning to advanced study of technique and improvisational styles on American folk instruments. Students may study 5-string banjo (bluegrass or clawhammer style), bluegrass guitar, resonator guitar, fiddle (violin, viola, cello), bass, mandolin, mandola or mandocello. Students must provide their own instruments. 1 credits, AL; ARP, Fall, Winter, Spring-M. Kreitzer
185. Carleton Choir: Bella Cantemus and Men's Chorus The Carleton Choir, the cornerstone of the choral program, is a select mixed chorus of Carleton students. Each term, the ensemble presents a concert of short and extended works from the large bodies of classical, ethnic and cultural repertories, including works for mixed, women and mens voices. Concerts are sometimes repeated off campus. Students must have good vocal skills, basic sight reading ability, and a high degree of interest in performing quality choral music. Admission is by audition. 1 credits, $S / C R / N C, A L$; ARP, Fall, Winter, Spring-L. Burnett
186. Carleton Singers The Carleton Singers is a small, highly select vocal group dedicated to performing a cappella choral music of all periods and styles. The Singers collaborate and perform with the Carleton Choir. Membership is offered to students who demonstrate exceptional vocal and musical skills. The need to balance all parts (Soprano, Alto, Tenor and Bass) dictates the size of the ensemble. With few exceptions, membership is for the full year. Admission by audition. 1 credits, $S / C R / N C, A L$; ARP, Fall, Winter, Spring-L. Burnett
187. Carleton Orchestra The Carleton Orchestra performs large symphonic masterpieces, such as Beethoven, Stravinsky and Bernstein. Concerti with students and faculty soloists, and smaller works for string and wind ensembles are also performed. Occasional sight-reading sessions. Admission by audition. 1 credits, $S / C R / N C$, AL; ARP, Fall, Winter, Spring-H. Valdivia
188. Carleton Chinese Music Ensemble The ensemble will use indigenous instruments and a Chinese approach to musical training in order to learn and perform music from China. Prerequisite: Previous music ensemble experience or permission of the instructor. 1 credits, $S / C R / N C, A L$; ARP, IS, Fall, Winter, Spring-G. Hong
189. Carleton Symphony Band The Carleton Symphony Band performs music selected from the standard repertory, including compositions by Holst, Grainger, Nelybel, and Sousa. Regular sightreading sessions. Admission by audition. 1 credits, S/CR/NC, AL; ARP, Fall, Winter, Spring-R.
Rodman
190. Carleton Jazz Ensemble The study and performance of the styles of important figures in jazz band
repertory such as Basie, Kenton, Ellington, Herman, Rich, and Evans as well as current trends in contemporary jazz band compositions. Repertory will be selected from published works and student original compositions and arrangements. Admission by audition. 1 credits, $S / C R / N C, A L ; A R P$, Fall, Winter, Spring-D. Singley
191. African Karimba Ensemble This ensemble focuses on the 15-key Shona (Zimbabwe) karimba (sometimes called a "thumb piano"). Students learn the fundamentals of solo and group playing on the karimba and study selections from the instrument's traditional repertoire. No musical training or experience is necessary. 1 credits, $S / C R / N C, A L$; ARP, IS, Winter, Spring-M. Russell
192. African Drum Ensemble The ensemble will use indigenous instruments and an African approach to musical training in order to learn and perform rhythms and songs from West Africa. Prerequisite: Music 199 and/or permission of the instructor. 1 credits, $S / C R / N C$, $A L$; ARP, IS, Fall, Winter, SpringJ. Johnson
193. African Mbira Ensemble An ensemble of 22-key Shona (Zimbabwe) mbira dza vadzimu. Playing techniques, improvisational practices, and traditional repertoire will be taught. Prerequisite: Music 191 or permission of the instructor. 1 credits, S/CR/NC, AL; ARP, IS, Spring-M. Russell
194. Chamber Music Small groups, formed by at least three students, will participate in the study and performance of keyboard and instrumental chamber music, non-western, or small jazz ensemble repertory, coached weekly by music faculty. Students must be registered and may not audit or participate in more than one group. 1 credits, $S / C R / N C, A L ;$ ARP, Fall, Winter, Spring—N. Melville
195. Pro Musica Singers The Pro Musica Singers is a small vocal ensemble that performs Medieval and Renaissance as well as contemporary classical compositions. The ensemble performs on and off campus throughout the academic year, culminating in a full spring-term concert. Students must have strong vocal skills and sight reading ability, and a high degree of interest in early and contemporary classical music. Placement is by audition. Concurrent enrollment in the Carleton Choir is highly recommended, though not required. 1 credits, $S / C R / N C, A L ; ~ A R P$, Not offered in 2010-2011
195. Jubilee Singers The Carleton Jubilee Singers expands on the famed Fisk Jubilee Singers model, and performs traditional African and Black American spirituals and gospel music a cappella. The ensemble performs on and off campus through out the academic year, culminating in a full spring term concert. Students must have strong vocal skills, a good ear, basic sight reading ability, and a high degree of interest in Black sacred music traditions. Placement is by audition. Concurrent enrollment in the Carleton Choir is highly recommended, though not required. 1 credits, $S / C R / N C, A L ; A R P$, Winter-L. Burnett
195. Vocal Jazz Ensemble The Carleton Vocal Jazz Ensemble is styled after popular vocal jazz groups such as Manhattan Transfer and New York Voices, and will perform works from the jazz and pop idioms. A jazz rhythm section accompanies the mixed vocal ensemble. Vocalists should possess outstanding vocal skills, good sight reading ability, and a high degree of interest in jazz and pop music. Placement is by audition. Concurrent enrollment in the Carleton Choir is highly recommended, though not required. 1 credits, $S / C R / N C$, $A L$; ARP, Not offered in 2010-2011
197. Class Guitar An introduction to classical and folk guitar: styles, chords and music notation for persons with little or no previous music instruction. Special fee: $\$ 75$. Not to be taken concurrently with Music 152 or 252 (Guitar). 1 credits, S/CR/NC, ND; NE, Fall, Winter, Spring—J. Ellinger
199. African Drum Class Class instruction in basic techniques of African drumming. No musical training or experience is necessary. Special fee: $\$ 75.1$ credits, $S / C R / N C, N D ; N E$, Fall, Winter, Spring—J. Johnson
200. Music Theory I An introduction to the theory and analysis of music, beginning with the basic
elements of musical pitch, rhythm, and harmony in a variety of musical styles, from classical to popular. The course covers the syntax of diatonic chord progressions, identifying cadences, basic melodic construction, and the description and analysis of short pieces in a single key. Also involves work in sight singing and aural skills. Students have assignments using the computers in the Music Resource Center and become conversant with musical notation programs and MIDI workstations. Three class meetings per week plus two aural skills labs. Prerequisite: Ability to read music in at least one clef. 6 credits, $A L$; LA, Fall-R. Rodman
201. Music Theory II Advanced diatonic and introductory chromatic harmony, with an emphasis on chord function, tonicizations and basic modulatory techniques. Also two voice schemas in the Galant musical style, with related compositional exercises. Students continue assignments on the computers in the Music Resource Center. Continued work in sight singing, aural skills, and contextual analysis of musical works in a variety of styles. Three class meetings per week plus two aural skills labs. Prerequisite: Music 200. 6 credits, AL; LA, Winter-J. London
202. Theory III The theory and analysis of larger musical forms. Large forms (Rondo, Theme and Variations, and Sonata Form) will be surveyed and analyzed, with an increased emphasis on writing about musical structure. Important sources in formal theory (including Reicha, Czerny, A.B. Marx, and Schoenberg) are read and discussed; the course involves a major research paper in musical analysis. Continued work in sight singing and aural skills. Three class meetings per week plus aural skills lab. Prerequisite: Music 201. 6 credits, $A L$, WR; LA, WR2, Spring-J. London
203. Music of the Twentieth Century I This five-week course, open to non-majors and required for Music majors, is an overall survey of the music of the twentieth century. Prerequisite: Ability to read music. 3 credits, AL; LA, WR2, Fall-S. Kelly
210. Medieval and Renaissance Music A study of the most characteristic forms of music from 800 to 1600 in the western tradition. Prerequisite: the ability to read music. 6 credits, $A L, W R ; L A, W R 2$, Not offered in 2010-2011
211. Baroque and Classical Music An examination of western art music of the seventeenth and eighteenth centuries, including Monteverdi, Bach, Handel, Haydn, Mozart and Beethoven. Prerequisite: Music 200 or consent of the instructor. 6 credits, AL, WR; LA, WR2, Winter-L. Archbold
220. Composition Two class meetings and individual instruction. Classes are devoted to the study of compositional techniques, analysis of relevant works, and computer/midi/synthesizer technologies. Individual instruction is focused on the student's original compositions. Prerequisites: Music 201 or Music 117 with consent of the instructor. 6 credits, AL; ARP, Winter-M. Childs
225. Orchestration Study of the instrumentation, ranges and capabilities of individual instruments, and the possibilities of instrumental combinations. Students will write and arrange short instrumental works for readings in the class. Demonstration of each instrument. Beginning score analysis. Prerequisite: Music 201 and prior ensemble experience, or consent of the instructor. 6 credits, AL; ARP, Not offered in 2010-2011
227. Introduction to the Perception and Cognition of Music Covers basic issues in auditory perception and cognition with an emphasis on pitch perception, including sensory discrimination, categorical perception, roughness and dissonance, and auditory streaming. The basic aspects of experimental design and elementary statistical analysis will also be covered. Student teams will prepare summaries of class readings (and lead class discussions); analyze and discuss data collected from inclass experimental demonstrations, and reproduce classic experiments in music perception. For a final project each student will write a modest term paper on a topic of their choosing (after consulting with the instructor). Prerequisite: A previous course in music or psychology, or permission of the instructor. 6 credits, SS; SI, QRE, Not offered in 2010-2011
243. Music of the Caribbean This course will introduce the musical traditions and socio-cultural contexts of a number of Caribbean nations, usually including Cuba, the Dominican Republic, Haiti, Jamaica, Puerto Rico, Trinidad, and the French Antilles. Both popular and African-derived sacred genres will be examined. While each island has unique and varied traditions, a number of themes relevant to Caribbean ethnomusicology will underlie each unit and tie them together. These include issues of acculturation, race, class, politics, nationalism, and globalization, and how these issues shape and are shaped by musical practices. Prerequisite: Familiarity with basic music terminology or permission of the instructor. 6 credits, AL, WR; LA, WR2, IS, Not offered in 2010-2011
245. Music of Africa An introduction to the music of sub-Saharan Africa, including music of the Manding, Yoruba, Ashanti, Mbuti, and Shona. Traditional and popular styles will be explored. Music is examined in its cultural context with particular attention to ethnic identity, political life, religion, and gender roles. Eight sessions will be spent on applied group instruction in West African drumming and Shona karimba. Prerequisite: none. 6 credits, AL, WR; LA, WR2, IS, Fall—M. Russell
246. Traditional Folk Music of the U.S. and British Isles Introduces students to the folk traditions of England, Ireland, Scotland, and to Anglo-American traditions in the United States. Emphasis is on understanding the musical and social values and structures underpinning the traditions. Genres include English, Scottish, and American ballad types and Irish vocal and instrumental music. Topics include musical change, class, gender, and the role revivals. Prerequisite: Familiarity with basic musical terminology. 6 credits, AL, WR; LA, WR2, IDS, Not offered in 2010-2011
247. The U.S. Folk Music Revival This course examines the folk revival movement in the United States from circa 1930 to the present, with emphasis on the period from 1958-1970. Topics include: the historical basis of musical style in the revival, the role of recorded music, the social construction of a "folk music" milieu, and detailed consideration of the music of several major figures of the period, including Pete Seeger, Woody Guthrie, Phil Ochs, Bob Dylan, Joan Baez, and others. Prerequisite: Students should be conversant with basic music terminology. 6 credits, $A L, W R ; L A, W R 2, I D S$, Winter-M. Russell
248. Music of India This course will concentrate on the classical Hindustani and Karnatak music traditions of North and South India, respectively. Fundamental theoretical elements will be introduced and used to analyze a variety of vocal and instrumental genres; developing evaluative listening skills will be emphasized. We will also consider the socio-cultural contexts of various historical periods, and how these have affected music and dance practice. In addition to the concert traditions of vocal and instrumental music, topics covered also will include devotional, folk, and popular genres, as well as classical dance. Prerequisite: Familiarity with basic music terminology or permission of the instructor. 6 credits, AL, WR; LA, WR2, IS, Not offered in 2010-2011
250. Piano Applied study on the instrument, with attention to both musical and technical development. Students will study appropriate works from the Baroque, Classical, Romantic, and Modern periods, with special reference to a composer's individual notation, technical challenges and stylistic interpretation. Music 250 is intended for the advanced piano student. Prerequisite: Permission of the instructor is required. 2 credits, S/CR/NC, AL; NE, Fall, Winter, Spring-K. Huber, M. McCright, N. Melville, M. Widman
250J. Piano (Juried) Applied study on the instrument, with attention to both musical and technical development. Students will study appropriate works from the Baroque, Classical, Romantic, and Modern periods, with special reference to a composer's individual notation, technical challenges and stylistic interpretation. Music 250 is intended for the advanced piano student. Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-K. Huber, M. McCright, N. Melville,

## M. Widman

251. Voice A study of voice production, breathing, tone development, diction, and pronunciation.

Selection (according to the individual voice) of Italian, German, French, and English songs of the Classic, Romantic, and Modern periods. Arias and songs from operas, oratorios, musical theater and popular songs from Western and non-Western traditions. In addition, one studio class per week. Prerequisite: Permission of the instructor. 2 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring-B. Allen, L. Burnett, P. Kent, M. Martz, R. Penning

251J. Voice (Juried) A study of voice production, breathing, tone development, diction, and pronunciation. Selection (according to the individual voice) of Italian, German, French, and English songs of the Classic, Romantic, and Modern periods. Arias and songs from operas, oratorios, musical theater and popular songs from Western and non-Western traditions. In addition, one studio class per week. Prerequisite: Permission of the instructor. 2 credits, AL; ARP, Fall, Winter, Spring-B. Allen, L. Burnett, P. Kent, M. Martz, R. Penning
252. Guitar Studies for the development of technique appropriate to the needs of the student. Music is chosen from all musical periods including folk picking, blues, ragtime, popular and classical styles. Students with no prior experience or lessons should take one term of class guitar (Music 197). Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring—J. Ellinger
252J. Guitar (Juried) Studies for the development of technique appropriate to the needs of the student. Music is chosen from all musical periods including folk picking, blues, ragtime, popular and classical styles. Students with no prior experience or lessons should take one term of class guitar (Music 197). Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-J. Ellinger
255. Violin Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring-E. Ericksen, M. Horozaniecki, H. Valdivia

255J. Violin (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-E. Ericksen, M. Horozaniecki, H. Valdivia
256. Viola Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L$; $N E, F a l l$, Winter, Spring-E. Ericksen, M. Horozaniecki, H. Valdivia
256J. Viola (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring—E. Ericksen, M. Horozaniecki, H. Valdivia
257. Cello Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring—T. Rosenberg
257J. Cello (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring—T. Rosenberg
258. Double Bass Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring-C. Martin
258J. Double Bass (Juried) Prerequisite: Permission of the instructor is required. 2 credits, $A L$; $A R P$, Fall, Winter, Spring-C. Martin
259. Flute Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E, F a l l$, Winter, Spring-M. Jamsa

259J. Flute (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring—M. Jamsa
260-01. Oboe Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L$; $N E$, Fall, Winter, Spring-M. Klemp

260-02. English Horn Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring-M. Klemp
260J-01. Oboe (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-M. Klemp

260J-02. English Horn (Juried) Prerequisite: Permission of the instructor is required. 2 credits, $A L$; ARP, Fall, Winter, Spring-M. Klemp
261. Clarinet Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L$; $N E$, Fall, Winter, Spring-N. Olsen
261J. Clarinet (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-N. Olsen
262. Saxophone Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L$; $N E$, Fall, Winter, Spring-D. Saunders
262J. Saxophone (Juried) Prerequisite: Permission of the instructor is required. 2 credits, $A L$; ARP, Fall, Winter, Spring-D. Saunders
263. Bassoon Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L$; $N E$, Fall, Winter, Spring—J. Bryce
263J. Bassoon (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring—J. Bryce
264. French Horn Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring-G. Anderson
264J. French Horn (Juried) Prerequisite: Permission of the instructor is required. 2 credits, $A L$; ARP, Fall, Winter, Spring-G. Anderson
265. Trumpet Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring—L. Deichert
265J. Trumpet (Juried) Prerequisite: Permission of the instructor is required. 2 credits, $A L ; A R P, F a l l$, Winter, Spring—L. Deichert

266-01. Trombone Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring—R. Rodman
266-02. Euphonium Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L$; $N E$, Fall, Winter, Spring-R. Rodman
266J-01. Trombone (Juried) Prerequisite: Permission of the instructor is required. 2 credits, $A L$; $A R P$, Fall, Winter, Spring-R. Rodman
266J-02. Euphonium (Juried) Prerequisite: Permission of the instructor is required. 2 credits, $A L$; ARP, Fall, Winter, Spring-R. Rodman
267. Tuba Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E, F a l l$, Winter, Spring-R. Rodman
267J. Tuba (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-R. Rodman
268. Orchestral Percussion Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C$, AL; NE, Fall, Winter, Spring-J. Johnson
268J. Orchestral Percussion (Juried) Prerequisite: Permission of the instructor is required. 2 credits,

AL; ARP, Fall, Winter, Spring—J. Johnson
269. Harp Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L$; $N E, F a l l$, Winter, Spring-E. Niemisto
269J. Harp (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-E. Niemisto
270. Harpsichord Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring—J. Hall
270J. Harpsicord (Juried) Prerequisite: Permission of the instructor is required. 2 credits, $A L$; $A R P$, Fall, Winter, Spring—J. Hall
271. Organ Basic piano skills required. Prerequisite: Permission of the instructor is required. 2 credits, S/CR/NC, AL; NE, Fall, Winter, Spring—L. Archbold, J. Hall

271J. Organ (Juried) Basic piano skills required. Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-L. Archbold, J. Hall
274. Recorder Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E, F a l l$, Winter, Spring-M. Krusemeyer
274J. Recorder (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring—M. Krusemeyer
275. Jazz Piano Study the tools for learning the jazz "language." Learn to improvise through scale and mode study, transcription, and composition. Turn chord symbols into chord voicings and accompaniment. Explore the blues, jazz "standards," and today's music. Three years piano required. Materials: staff paper and portable tape player. Prerequisite: Permission of the instructor is required. 2 credits, S/CR/NC, AL; NE, Fall, Winter, Spring—L. Caviani
275J. Jazz Piano (Juried) Study the tools for learning the jazz "language." Learn to improvise through scale and mode study, transcription, and composition. Turn chord symbols into chord voicings and accompaniment. Explore the blues, jazz "standards," and today's music. Three years piano required. Materials: staff paper and portable tape player. Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-L. Caviani
276. Jazz Double Bass Instruction in Jazz Bass technique and theory. Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C$, $A L$; NE, Fall, Winter, Spring-K. Clements

276J. Jazz Double Bass (Juried) Instruction in Jazz Bass technique and theory. Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-K. Clements
277. Jazz and Blues Guitar Study of chord voicings, accompanimental techniques, and solo guitar performance in the jazz idiom. Prerequisites: previous study of guitar and the ability to read music, or the permission of the instructor. Students must provide their own instruments. Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring-D. Singley

277J. Jazz \& Blues Guitar (Juried) Study of chord voicings, accompanimental techniques, and solo guitar performance in the jazz idiom. Prerequisites: previous study of guitar and the ability to read music, or the permission of the instructor. Students must provide their own instruments. Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-D. Singley
278. Drum Set Instruction Drum Set Instruction on/in jazz and popular drumming styles which use the standard drum set. Equipment available for registered students. Prerequisite: Permission of the instructor is required. 2 credits, S/CR/NC, AL; NE, Fall, Winter, Spring-J. Johnson
278J. Drum Set Instruction (Juried) Drum Set Instruction on/in jazz and popular drumming styles
which use the standard drum set. Equipment available for registered students. Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-J. Johnson
279. Jazz Improvisation The study of the basic grammar and syntax of jazz improvisation styles, including transcribing solos, chord/scale materials and melodic patterns. Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ;$ NE, Fall, Winter, Spring-Staff

279J. Jazz Improvisation (Juried) The study of the basic grammar and syntax of jazz improvisation styles, including transcribing solos, chord/scale materials and melodic patterns. Prerequisite: Permission of the instructor is required. 2 credits, $A L ; A R P$, Fall, Winter, Spring-Staff
280. Raga: Vocal or Instrumental Study of Hindustani Music Beginning, intermediate, and advanced students of voice, guitar, violin, flute, clarinet, etc., approach raga from their current level of musicianship. In all cases, traditional practical instruction is complemented by some theoretical and philosophical exploration of the underpinnings of the music. Prerequisite: Permission of the instructor is required. 2 credits, S/CR/NC, AL; NE, Fall, Winter, Spring-D. Whetstone
280J. Raga:Voc/Instr Study Hindustani (Juried) Beginning, intermediate, and advanced students of voice, guitar, violin, flute, clarinet, etc., approach raga from their current level of musicianship. In all cases, traditional practical instruction is complemented by some theoretical and philosophical exploration of the underpinnings of the music. Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring - D. Whetstone
281. Sitar Beginning through advanced study of sitar in the gayaki ang style of Ustad Vilayat Khan. Previous musical experience is not necessary. Sitars are provided. Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring-D. Whetstone
281J. Sitar (Juried) Beginning through advanced study of sitar in the gayaki ang style of Ustad Vilayat Khan. Previous musical experience is not necessary. Sitars are provided. Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-D. Whetstone
282. Chinese Musical Instruments Beginning through advanced study on traditional Chinese instruments, pipa (Chinese lute), erhu (Chinese violin), guzheng (Chinese zither), zhongruan (Chinese moon guitar), hulusi, bawu and dizi (Chinese bamboo flutes). Prerequisite: Permission of the instructor is required. 2 credits, S/CR/NC, AL; NE, Fall, Winter, Spring-G. Hong
282J. Chinese Musical Instruments (Juried) Beginning through advanced study on traditional Chinese instruments, pipa (Chinese lute), erhu (Chinese violin), guzheng (Chinese zither), zhongruan (Chinese moon guitar), hulusi, bawu and dizi (Chinese bamboo flutes). Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-G. Hong
283. Ethnic Drumming Instruction Ethnic drumming instruction in various ethnic drumming styles including West African (Ghanian instruments), Cuban (congas), North Indian (tabla) and Middle Eastern (dumbek). Equipment available for registered students. Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E$, Fall, Winter, Spring-J. Johnson
283J. Ethnic Drumming Instruction (Juried) Ethnic drumming instruction in various ethnic drumming styles including West African (Ghanian instruments), Cuban (congas), North Indian (tabla) and Middle Eastern (dumbek). Equipment available for registered students. Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-J. Johnson
284. American Folk Instruments Beginning to advanced study of technique and improvisational styles on American folk instruments. Students may study 5 -string banjo (bluegrass or clawhammer style), bluegrass guitar, resonator guitar, fiddle (violin, viola, cello), bass, mandolin, mandola or mandocello. Students must provide their own instruments. Prerequisite: Permission of the instructor is required. 2 credits, S/CR/NC, AL; NE, Fall, Winter, Spring-M. Kreitzer

284J. American Folk Instrument (Juried) Beginning to advanced study of technique and improvisational styles on American folk instruments. Students may study 5-string banjo (bluegrass or clawhammer style), bluegrass guitar, resonator guitar, fiddle (violin, viola, cello), bass, mandolin, mandola or mandocello. Students must provide their own instruments. Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-M. Kreitzer
285J. Composition (Juried) Individual instruction focusing on the student's original compositions. Course work includes the study of compositional techniques, analysis of relevant works, and computer/MIDI/synthesizer technologies. The course is particularly directed toward the major who wishes to pursue the composition option in the Senior Integrative Exercise. Prerequisite: Music 220 or permission of the instructor. 1 credits, AL; ARP, Fall, Winter, Spring-M. Childs

286J. Composition (Juried) Individual instruction focusing on the student's original compositions. Course work includes the study of compositional techniques, analysis of relevant works, and computer/MIDI/synthesizer technologies. The course is particularly directed toward the major who wishes to pursue the composition option in the Senior Integrative Exercise. Prerequisite: Music 220 or permission of the instructor. 2 credits, AL; ARP, Fall, Winter, Spring-M. Childs
299. Recital A public music recital of a minimum of thirty minutes of solo performance (some chamber music may be included). Students enrolling in 299 do so in lieu of registering for applied lessons; 299 includes nine one-hour lessons. Prerequisite: completed recital form and permission of the Music Department the term prior to the recital. Fees and financial aid for 299 are the same as for two-credit applied lessons. 2 credits, AL; ARP, Fall, Winter, Spring-Staff
303. Music of the Twentieth Century II This five-week course, required for Music majors, is primarily an analysis class designed to equip the major with analytical techniques in non-tonal music from Schoenberg to the avant-garde. Prerequisites: Music 202 and 203. 3 credits, AL; LA, WR2, Fall-R. Rodman
307. Seminar in Music Analysis An introduction to advanced analytical techniques for larger formal structure in musical repertoire from the classic, romantic and early twentieth century. Prerequisite: Music 201. 4 credits, AL; LA, WR2, Not offered in 2010-2011
312. Romantic Music An examination of western art music of the nineteenth and twentieth century, including Schubert, Berlioz, Brahms, and Wagner. Prerequisite: Music 201 and 211 or consent of the instructor. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
330. Jazz History Seminar A research seminar in jazz history, this course will introduce students to the basic bibliographic tools, historical artifacts, and critical tradition of the field. Students will present short oral and written reports on selected examples of this material in preparation for a major research paper on a topic chosen in consultation with the instructor. Prerequisites: Music 110, 130 or permission of the instructor. 6 credits, AL, WR; LA, WR2, Not offered in 2010-2011
385J. Juried Lessons for the Major Applied lessons on the student's major instrument or voice, with attention to both musical and technical development. Each major will pursue a course of study tailored to the student's specific needs. The student's performance abilities are evaluated twice, by means of a jury, before and after instruction. Prerequisite: Music major standing or permission of the department. 1 credits, AL; ARP, Fall, Winter, Spring-Staff
386J. Juried Lessons for the Major Applied lessons on the student's major instrument or voice, with attention to both musical and technical development. Each major will pursue a course of study tailored to the student's specific needs. The student's performance abilities are evaluated twice, by means of a jury, before and after instruction. Prerequisite: Music major standing or permission of the department. 2 credits, AL; ARP, Fall, Winter, Spring-Staff
398. Music Major Colloquium The music major colloquium is required for all music majors. The general purpose of the course is to introduce students to some of the issues and techniques of research in music history and theory. Prerequisite: Music major standing. 2 credits, $S / C R / N C, N D ; N E, S p r i n g-L$. Archbold
400. Integrative Exercise Required of senior majors. The integrative exercise may be fulfilled by completion of a significant composition, lecture-recital, or research-paper project. Students who wish to fulfill Music 400 with such projects must meet department-specified qualifying criteria. Music Major Colloquium (Music 398) is a preparatory course required before students may enroll for Music 400. 1-4 credits, S/NC, ND; NE, Fall, Winter, Spring-L. Archbold

## NEUROSCIENCE CONCENTRATION (NEUR)

Director: Professor Fernán Jaramillo<br>Professors: Fernán Jaramillo, Julie J. Neiworth<br>Associate Professors: Matt Rand, Lawrence Wichlinski<br>Assistant Professor: Jennifer Ross Wolff

## Requirements for the Concentration

Core Courses:
BIOL 125 Genes, Evolution, and Development
BIOL 125 Genes, Evolution, and Development: A Problem-solving Approach
BIOL 386 Neurobiology
PSYC 216 Behavioral Neuroscience
PSYC 217 Laboratory Research Methods in Behavioral Neuroscience Electives:
BIOL 342 Animal Developmental Biology (Not offered in 2010-2011)
BIOL 343 Animal Developmental Biology Laboratory (Not offered in 2010-2011)
BIOL 365 Topics in Neuroscience
BIOL 368 Developmental Neurobiology (Not offered in 2010-2011)
BIOL 369 Developmental Neurobiology Laboratory (Not offered in 2010-2011)
BIOL 373 Behavioral Endocrinology (Not offered in 2010-2011)
LING 265 Language and Brain (Not offered in 2010-2011)
MUSC 227 Introduction to the Perception and Cognition of Music (Not offered in 2010-2011)
PHIL 253 Philosophy of Cognitive Science (Not offered in 2010-2011)
PHYS 261 Medical Physics
PSYC 212 Comparative Cognition (Not offered in 2010-2011)
PSYC 260 Health Psychology (Not offered in 2010-2011)
PSYC 263 Sleep and Dreaming
PSYC 318 Psychopharmacology
PSYC 366 Cognitive Neuroscience
PSYC 367 Clinical Psychobiology (Not offered in 2010-2011)
PSYC 371 Evolutionary and Developmental Trends in Cognition (Not offered in 2010-2011)
PSYC 376 Neural Plasticity (Not offered in 2010-2011)
Capstone:
NEUR 395 Neuroscience Capstone Seminar
395. Neuroscience Capstone Seminar This capstone seminar will cover current approaches and techniques in the field of neuroscience. Guest speakers and Carleton faculty in neuroscience and related areas will present their research. 3 credits, $S / C R / N C, N D$; NE, Spring-Staff

## PHILOSOPHY (PHIL)

Chair: Associate Professor Anna Moltchanova
Professor: Roy Elveton
Visiting Professor: Russ Shafer-Landau
Associate Professor: Anna Moltchanova
Assistant Professors: Angela Curran, Jason Decker, Daniel Groll

## Prerequisites for Courses in Philosophy

For courses numbered 100-210: none.
For courses numbered 211 through 299: six credits in philosophy (not including credits earned in Argument and Inquiry seminars) or permission of the instructor.

For courses numbered 300 through 400: twelve credits in philosophy (not including credits earned in Argument and inquiry seminars) or permission of the instructor.

## Requirements for a Major

Sixty-nine credits in philosophy, including Philosophy 100 or 110 ( 6 credits); 210, 211, 212, and 213 ( 24 credits); 270, 272, or 274 ( 6 credits); two 395 's advanced seminars ( 12 credits), 399 , and 400 ( 9 credits); and two other courses numbered 220 or above ( 12 credits).

## Philosophy Courses

100. Evolution and Mind An introduction to issues in ethics and the philosophy of mind and language in the light of evolution theory. Central issues to be discussed include: the nature of evolution theory; the nature and evolution of language and cognition; the "nature versus nurture" debate; the nature and evolution of morality. 6 credits, AI, WR1, Fall-R. Elveton
101. Arguing About Politics This course introduces students to several classic texts in the history of political thought and provides them with an opportunity to interpret these texts critically by concentrating on argument analysis. Students will also learn to construct and effectively communicate their own arguments about foundational issues in politics. We will discuss justifications of democracy, the challenge of diverse citizenship, the role of deliberation in politics and related questions. We will read works by Plato, Aristotle, Hobbes, Rousseau, Locke, de Tocqueville, Mill as well as some contemporary political theorists. 6 credits, HU; HI, Not offered in 2010-2011
102. Personal Identity This course is an introduction to philosophy through the topic of personal identity. What is a person? What is it that makes possible our continued existence through time? Is it a soul? Our bodies? Or is it a stream of memories connecting us to past events? We also examine the place of race in determining personal identity. Readings will be drawn from historical as well as contemporary sources. 6 credits, HU, RAD; HI, Winter, Spring-A. Curran
103. Mind, Matter, Consciousness According to a common view of the mind, mental states are nothing more than states of the brain. There are certain features of human intellection, subjective experience, and action which have prompted some philosophers to argue that human mental activity is not reducible to brain activity. Some have gone on to argue that the human mind is immaterial and capable of surviving the death of the body. We will examine variants of these views as well as objections to them, reading selections from such historical figures as Plato, Aristotle, and Descartes, and such contemporary philosophers as Churchland, Nagel, and Searle. 6 credits, HU; HI, Winter-A. Moltchanova
104. Killing Although we tend not to think about it very often, killing is very much a part of our lives.

We confront it whenever we eat an animal, talk about the wisdom of intervention in foreign conflicts, consider federal funding of abortion or ask whether people have the right to terminate their own lives. This course will explore killing in its various guises, with special focus on war, our relationship with animals, abortion and euthanasia. Students will be asked to consider various views on these matters while developing the skills to clearly state and defend, via philosophical argument, their own views. 6 credits, HU, WR; HI, WR2, Offered in alternate years, Fall-D. Groll
110. Science, Faith, and Rationality This seminar will introduce the student to the study of philosophy through a consideration of various epistemic and metaphysical issues surrounding science and religion. What distinguishes scientific inquiry from other areas of inquiry: Its subject matter, its method of inquiry, or perhaps both? How does scientific belief differ from religious belief, in particular? Is the scientist committed to substantive metaphysical assumptions? If so, what role do these assumptions play in scientific investigation and how do they differ from religious dogma (if they do)? Our exploration of these questions will involve the consideration of both classic and contemporary philosophical texts. 6 credits, HU; HI, Fall—J. Decker
210. Logic The study of formal logic has obvious and direct applicability to a wide variety of disciplines (including mathematics, computer science, linguistics, philosophy, cognitive science, and many others). Indeed, the study of formal logic helps us to develop the tools and know-how to think more clearly about arguments and logical relationships in general; and arguments and logical relationships form the backbone of any rational inquiry. In this course we will focus on propositional logic and predicate logic, and look at the relationship that these have to ordinary language and thought. 6 credits, $N D ; F S R$,

## Winter—J. Decker

211. Metaphysics The aim of metaphysics has traditionally been to identify the nature and structure of reality. The topics of this course are the topology of time, identity of things and individuals, causality, free will, and the referents of general terms. We will read a variety of classic and contemporary texts, which are organized topically. Prerequisite: any section of Philosophy 110.6 credits, $H U, W R, H I, W R 2$, Not offered in 2010-2011
212. Epistemology Do you know that you're not just a brain, floating in a vat, receiving stimulations through electrodes? Or perhaps an immaterial soul being conned by a malicious demon? In this course, we will use these skeptical worries as a launching point for thinking about epistemological issues: What exactly is knowledge? Do we ever have it? If so, when, and how? We will approach these questions through an examination of theories of epistemic justification, including foundationalism, coherentism, internalism, externalism, and virtue epistemology. We will then consider some critiques of traditional epistemology, including feminist epistemology and naturalized epistemology. 6 credits, $\mathrm{HU}, \mathrm{WR}, \mathrm{HI}$, WR2, Spring—J. Decker
213. Ethics How should we live? What makes certain actions right and others wrong? And why should I care about morality? These questions are at the heart of the study of ethics. We begin by looking at particular ethical issues (abortion, poverty, killing in war) with special emphasis on what is involved in making a philosophical "argument" for our convictions on these matters. We then turn to foundational issues in ethics concerning which principle(s) determine(s) govern right and wrong action, before turning to the question of whether everyone has reason to be moral. Readings are drawn from a combination of contemporary and historical sources. Prerequisite: Any 100-level course in philosophy. 6 credits, HU, WR; HI, WR2, Fall-D. Groll
214. Film and the Emotions The evocation of emotions, of one kind or another, is central to our experience of watching films. We look at some central questions philosophers have raised about film and the emotions: 1) How can we be justified in having genuine emotions in response to characters in film when we know they do not exist? 2) How can we enjoy horror films in spite of the negative emotions that they elicit? Other topics include: identifying with characters in film; film and the
manipulation of our emotions; and film music. Weekly film screenings are required in addition to the regular class meeting. Prerequisite: One previous course in philosophy or a CAMS 300-level course on film theory or permission of the instructor. 6 credits, HU, WR; HI, WR2, Winter-A. Curran
215. Philosophy of Mind What is the relationship between the mind and the brain? Are they identical? Or is there mental "stuff" in addition to physical stuff? Or perhaps some physical stuff has irreducibly mental properties? These, and related questions, are explored by philosophers under the heading of "the mind-body problem." In this course, we will start with these questions, looking at classical and contemporary defenses of both materialism and dualism. This investigation will lead us to other important questions such as: What is the nature of mental representation, what is consciousness, and could a robot have conscious states and mental representations? 6 credits, $H U, W R ; H I, W R 2, F a l l-J$. Decker
216. Consciousness and Subjectivity An exploration of recent theories of consciousness and the nature of the self, drawing upon phenomenological accounts (Husserl and Merleau-Ponty) and the recent work of Searle, Chalmers and Zahavi. Prerequisite: One course in philosophy. 6 credits, HU; HI, Not offered in 2010-2011
217. Social and Political Philosophy: Justice and Politics What distinguishes just states from unjust states? Are some states so unjust that we are not obliged to comply with their laws? We will examine answers to these and related questions proposed by liberal, socialist, libertarian, communitarian, feminist and post-modern theories of political and social justice. The following are some of the authors we will read: Plato, Aristotle, Kant, Marx, Berlin, Lyotard, Nozick, Rawls, Habermas, Sandel, Seyla Benhabib, Jean Hampton, Charles Taylor, and Amy Gutmann. 6 credits, HU; SI, Fall—A. Moltchanova
218. Aesthetics Various issues in aesthetics: the definition of art, the nature of the aesthetic, the description, interpretation, and evaluation of aesthetic objects. Readings will be drawn primarily from the works of philosophers and from case materials. 6 credits, HU, WR; HI, WR2, Not offered in 20102011
219. Environmental Ethics What moral stance should we take toward the non-human part of our natural environment? How should we treat animals, for instance? Is there any justification for treating human beings with special consideration, or is this an objectionable form of speciesism? How should we treat other non-animal beings? What stance should we take toward the ecological system as a whole? In this class we will consider various ethical approaches in an attempt to raise the level of sophistication with which we can go about framing and supporting answers to these (and other similar) questions. 6 credits, HU, WR; HI, WR2, Not offered in 2010-2011
220. Philosophy of Physics A study of the implications that our best current physical theories have for our understanding of the world, as well as the implications that our best philosophical theories have for our understanding of physical theory. We will focus primarily on relativity theory and quantum mechanics. Possible topics include: the nature of causality, the relativity of simultaneity, the twin paradox, hidden variables, the measurement problem, nonlocality, the relationship between quantum theory and relativity theory, and the very idea of scientific truth. 6 credits, HU; HI, Spring-J. Decker
221. Philosophy of Cognitive Science A study of the central theories, methodological and philosophical issues and major competing paradigms regarding the nature of human cognition. Topics to be treated include: the nature of mental representations, intentionality, consciousness, the structure of language, nativism and externalism in the cognitive sciences, embodied cognition and the constitutive roles of culture and evolution in shaping cognitive processes. 6 credits, HU; HI, Not offered in 2010-2011
222. Ancient Greek Philosophy: Knowledge and Skepticism Is it possible to know anything for certain? A skeptic denies that we are ever justified in claiming to know something. This class examines the debates in ancient Greek philosophy regarding the nature and justification of knowledge. Is
knowledge relative to the perceiver? Is it possible that knowledge can be found in a transcendental realm of abstract Forms? Or should knowledge be acquired by induction based on sense perception? Should we withhold our assent from everything that is less than certain? Readings from Heraclitus, Plato, Aristotle, Pyrrho and Sextus Empiricus. No prerequisites. 6 credits, HU, WR; HI, WR2, Spring—A. Curran
223. Modern Philosophy An examination of the development of Western philosophy in the seventeenth and eighteenth centuries through the writings of Descartes, Locke, Spinoza, Leibniz, Berkeley, Hume, and Kant. We focus on the impact of modern scientific thought on the philosophical tradition's understanding of the place of the human being in the world. Topics include: Is it possible to have knowledge of the world? What is the nature of reality? What is the human mind? Are we free? 6 credits, HU, WR; HI, WR2, Winter-D. Groll
224. Existentialism We will consider the emergence and development of major themes of existentialism in the works of Kierkegaard and Nietzsche, as well as "classical" existentialists such as Heidegger, Sartre and De Beauvoir. We will discuss key issues put forward by the existentialist movement, such as "the question of being" and human historicity, freedom and responsibility and look at how different authors analyzed the nature and ambitions of the Self and diverse aspects of subjectivity. 6 credits, $H U$; HI, Winter-A. Moltchanova
225. Freedom and Responsibility Are our actions entirely determined by our biological make-up and social circumstances or are they, at least sometimes, free? Do collectives have a life of their own? When can we hold agents responsible for their actions? What about collective actions, like waging a war? Are group intentions just aggregates of individual intentions? These and other questions concerning the constitution and actions of agents will be discussed in the context of classic readings on agency and free will and contemporary debates in social ontology. 6 credits, HU, WR; HI, WR2, Spring-A.

## Moltchanova

395. Individuality and Autonomy In On Liberty, JS Mill defends the idea that people have the right to make decisions about their own lives on the grounds that there is something important about individuality or, to put it in slightly more philosophical terms, about being autonomous. But what exactly does it mean to be an individual? To be autonomous? And why think it is valuable given that people often make very poor decisions about their own lives? This course will explore these questions through a combination of historical and contemporary texts in the hopes of figuring out what it means to be autonomous and why it matters. Prerequisite: Two previous courses in philosophy. 6 credits, $H U ; H I$, Spring-D. Groll
396. Samuel Beckett A seminar focusing on Beckett's novels and plays within the context of twentieth century postmodern philosophy and literary theory. 6 credits, ND; HI, Winter-R. Elveton, R. Weiner
397. Senior Thesis The planning, preparation, and completion of a philosophical paper under the direction of a member of the department and as part of a seminar group. 6 credits, ND; HI, Winter-D. Groll
398. Integrative Exercise A colloquium in which seniors defend their senior theses and discuss the senior theses of others. 3 credits, S/NC, ND; NE, Fall, Spring—Staff

## PHYSICAL EDUCATION, ATHLETICS, AND RECREATION (PE)

Chair and Athletic Director: Professor Gerald Young
Associate Athletic Director: Associate Professor Heidi L. Jaynes
Professors: Andrew M. Clark, Guy A. Kalland, Leon Lunder, Donna M. Ricks, Gerald L. Young

Associate Professors: Amy Erickson, Heidi L. Jaynes
Assistant Professors: Luciano Battaglini, Robert S. Carlson, Keren A. Gudeman, Kurt Ramler, David H. Ricks, Aaron Rushing

Instructor: Cassie M. Kosiba

## Description of Program

The Physical Education Program includes a variety of activity courses from which the student may select. Emphasis is on an "activity for all" approach in hopes that each person will discover that physical activity can contribute to his/her well being now and in the future. Lifetime sports such as swimming, racquetball, tennis, aerobics, badminton, golf, skiing (downhill and cross country), and skating are particularly popular. To accommodate those who would prefer a team sport experience, classes in volleyball, basketball, frisbee, and hockey are offered. Weight training, aerobics, jogging, and cycling classes help those who wish to work on various components of their fitness. Classes are coed and instruction is given at beginning, intermediate, and advanced levels.

Courses are provided for those seeking American Red Cross certification in First Aid and CPR, Life Guard Training, and Water Safety Instructor.

Students interested in dance can elect to specialize in modern dance or ballet. Folk, social, and jazz classes are also popular (see the Department of Theater and Dance elsewhere in the Catalog for dance courses which may be taken for academic credit).

## Requirements

Four terms of physical education are required for graduation. It is strongly recommended that students complete this requirement by the end of their sophomore year. Classes usually meet twice a week. Students choose their activity class from a large selection of courses each term and may receive a maximum of one Physical Education activity credit per term. Physical Education credit may be earned for participation on a club team that meets the requirements stipulated by the department. Each approved club may be granted credit in only one term each academic year. Students may receive only two of the required four PE credits by participating in a club sport. For students matriculating Fall 2010 and thereafter, during his/her time at Carleton, any student may receive the four required PE credits by participating in an approved club sport. The club credits may be received in the same or different approved club sport.

## Facilities

Classes and groups meet in the most ideal setting possible, making use of Cowling Recreation Center, Carleton Recreation Center, West Gymnasium, Laird Stadium, Arb and Bell Field Tennis Courts, various outdoor playing fields around the campus and several off-campus sites. Physical Education classes, varsity teams, clubs, and intramurals are all tightly scheduled since the demands for use are very heavy.

## Intercollegiate Athletics

Carleton sponsors intercollegiate varsity teams for both men and women in the following sports: Basketball, Cross Country, Track and Field (indoor and outdoor), Soccer, Swimming/Diving, Golf and Tennis.

Men only: Baseball, Football
Women only: Softball, Volleyball
Physical Education credit can be earned for participation on an intercollegiate team. Candidates for athletic teams should have a current physical examination prior to the start of practice in their sport.

The College does not accept financial responsibility for medical, surgical, or other expenses arising out of athletic injuries which exceeds the care provided through the College Health Services and/or our authorized Athletic Trainer.

Carleton is a member of the Minnesota Intercollegiate Athletic Conference which participates in

## Division III of the NCAA.

## Intramural Sports

The primary goal of the Carleton Intramural Sports Program is to give Carleton students, faculty and staff the opportunity to enjoy a good recreational athletics program. Such a program can provide a balance of activities, further the social and athletic components of a Carleton student's education and enhance the professional lives of faculty and staff. The program is designed to encourage dorm-floor participation; athletic activities provides the opportunity to interact in a fun, relaxing, healthy and cooperative environment. Similarly, faculty and staff participation is encouraged. The intramural program is a great opportunity for all members of the college community to interact in an extracurricular environment.

Fall: Quidditch, Ultimate Frisbee, Tennis, Sand Volleyball, Dodgeball, 6x6 Flag Football, Racquetball

Winter: Broomball, Indoor Soccer, 5x5 Basketball, Floor Hockey
Spring: Soccer, Ultimate Frisbee, Sand Volleyball, Tennis, Softball
Club Sports Student directed organizations allow interest groups to flourish in the following activities:

Aikido, Alpine Ski, Badminton, Competitive Dance, Cycling, Field Hockey, Ice Hockey, Karate, Lacrosse, Nordic Ski, Rugby, Sailing, Synchronized Swimming, Table Tennis, Tae Kwon Do, Tennis, Ultimate Frisbee, Men's Volleyball, Water Polo.

## Activity Courses

All activity classes are offered on a S/NC basis.
101. Aerobics Basic dance steps, calisthenic-type movements and locomotor skills (running, jumping, hopping, skipping, etc.) are combined into vigorous routines which are performed to the beat of popular music. All classes offer components of strength development, flexibility and cardio-vascular fitness. No experience necessary. Wear comfortable clothes and shoes with good support (no running shoes). credits, Fall, Winter, Spring-M. Caron, N. Stuckmayer
102. Aikido, Intermediate Empty-hand techniques are continued and weapon techniques are introduced. More varieties of breakfalls are learned as the emphasis of the class shifts to higher-level techniques. An additional fee of $\$ 30$ is required. Prerequisite: Aikido, Beginning credits, Fall-J. Ward
103. Aikido, Beginning Developed from samurai traditions, Aikido is Japanese budo--a method of training and study that applies the physical principles of a martial art toward the goals of peace, harmony, and self-improvement. The movements of Aikido focus on learning to move in harmony with another, yet can be an effective self-defense. Students also learn many ways of falling safely and getting up quickly. Applied properly, the insights gained can lead to better self-respect and more harmonious relationships. An additional fee of $\$ 30$ is required. credits, Fall, Winter, Spring-J. Ward
104. Aikido, Advanced More complex empty-hand and weapon techniques are taught. Advanced breakfalls are added along with more intense physical and mental training. An additional fee of $\$ 30$ is required. Prerequisite: Beginning Aikido. credits, Fall, Winter, Spring-J. Ward
105. Badminton, Beginning Fundamental skills of the game are presented (serve, clear, drop shot, smash and drive). Various drills are used to improve skills, with ample opportunity for play. Rules and strategy for both singles and doubles are stressed. Open to all abilities. All equipment is furnished. credits, Not offered in 2010-2011
106. Badminton, Intermediate The objective of the course is to review basic skills and strategies of badminton, in addition to learn new techniques and strategies of singles and doubles play with greater emphasis on competition. Advanced singles and doubles strategies will be covered as well as involvement in tournament play. credits, Not offered in 2010-2011
107. Ballet I A beginning course in ballet technique, including basic positions, beginning patterns and
exercises. Students develop an awareness of the many ways their body can move, an appreciation of dance as an artistic expression and a recognition of the dancer as an athlete. credits, Fall, Winter, Spring-J. Bader
108. Ballet II For the student with previous ballet experience this course emphasizes articulation of the technique and development of ballet vocabulary and movement theories. Opportunity to continue to work on technique and to more finely tune the awareness of movement begun in Level I. credits, Fall, Winter, Spring—J. Bader
109. Ballet III This is an advanced class for students who have some capabilities and proficiency in ballet technique. Content is sophisticated and demanding in its use of ballet vocabulary and musical phrasing. credits, Spring—J. Bader
110. Fundamentals of Baseball Fundamental skills of the game are introduced including throwing, catching and hitting. Rules and strategies will be introduced but the focus will be on developing skills. Students must provide their own baseball or softball gloves. credits, Fall, Winter-A. Rushing
111. Basketball, Three on Three Open to all who enjoy basketball and have a basic understanding of the game. Stress will be placed upon vigorous activity, though instruction will be given on basic rules, strategy and skill improvement drills. This course offers an opportunity for a great workout in a co-ed team setting. credits, Winter, Spring-G. Kalland, K. Ramler
117. Cote Fitness Students are tested (cardiovascular efficiency, strength, flexibility and body composition) to determine base-fitness levels. Individualized programs are established based on test results and goal setting by the students. credits, Winter, Spring-L. Lunder
119. Cycling, Recreational The class is geared to beginning, recreational cyclists, not the competitive cyclist. Students must provide their own bicycles. Helmets are mandatory. Information on equipment, repair of equipment, and rules of the road are interspersed with opportunities to develop fitness by riding the various routes around Northfield. credits, Fall-A. Clark
121. Fencing, Beginning An instructional class for beginners. Students learn footwork, techniques and simple attacks and defense. Foils, masks and fencing jackets are provided. Students are encouraged to continue with intermediate fencing to further develop skills. credits, Fall, Winter, Spring—Staff
124. Fitness for the Athlete For the off-season or pre-season competitor (IM, club, or varsity). The winter term course will focus on those who want to stay in shape and hone their flexibility, balance, strength and an aerobic threshold. This is a challenging course that will teach techniques and strategies to work out on your own as well as motivate you to improve or work weaker areas. Incorporating training on the track, free weights, bosu, jump ropes and much more. The spring term class will focus on olympic lifts, plyometrics and speed training. credits, Winter-K. Gudeman, K. Ramler
125. Folk Dance Folk dance includes a variety of dances of varying intricacy from around the world. No experience necessary. credits, Winter, Spring-Staff
127. Frisbee, Beginning Ultimate For the beginning or moderately experienced player who wants to develop basic skills. See what all the fuss is about. If a golden retriever can do it, so can you! credits, Fall-Staff
128. Frisbee, Advanced Ultimate Enhance your skills and abilities in Ultimate. credits, Spring—Staff
129. Golf, Beginning Basic instruction and opportunities to improve your game are provided. All equipment is provided. Experience not necessary. credits, Spring-K. Ramler
130. Advanced Golf For students who have experience with the fundamentals of the swing and the game and have also played (several times) on regulation golf courses. Each student must have (or have access to) their own set of clubs. credits, Spring-G. Kalland
131. Ice Hockey, Beginning This course is designed to give men and women the opportunity to play ice hockey together in a fun and non-competitive setting. Absolutely no body checking or rough play is allowed. Skill development in skating, stick handling, passing and shooting is stressed as well as position play and rules necessary to ensure the safety of the participants. Helmets are recommended and furnished. Students must provide their own skates and hockey sticks. Highly accomplished or "hardcore" hockey players have no place in this class. credits, Winter-Staff

## 131. Ice Hockey, Intermediate credits, Winter—Staff

133. Ice Skating, Beginning The class is divided into several ability groups with an instructor assigned to each small group. Figure skating skills are presented in progressive order allowing individuals to move along at their own pace. Classes meet outdoors on the Bald Spot rink. Students must provide their own figure skates. credits, Winter-Staff
134. Ice Skating, Intermediate Designed for students with previous skating experience, this course develops skills with emphasis on edges, backward stroking, basic combinations, jumps and figures. Classes meet outdoors on the Bald Spot rink. Students must provide their own figure skates. credits, Winter-Staff
135. Outdoor Activities: Canoeing This course is designed for adventurous souls not afraid to get dirty. Each week we will either take a trip down the mighty Cannon in our canoes or pursue another outdoor adventure. Fishing and tree climbing are possibilities. Prerequisites: ability to swim, positive attitude. credits, Not offered in 2010-2011
136. Indoor Soccer Fundamental skills of indoor soccer are introduced. Skills will be developed using exercises, small-sided games and other methods. Rules and strategy will be introduced and full-sided games will be incorporated into each session. There is an emphasis on teamwork and enjoyment of the game. credits, Winter-B. Carlson
137. Outdoor Soccer Fundamental skills of outdoor soccer are introduced. Skills will be developed using exercises, small-sided games and other methods. Rules and strategy will be introduced and fullsided games will be incorporated into each session. There is an emphasis on teamwork and enjoyment of the game. credits, Spring-B. Carlson
138. Intramural Sports This course is designed to give men and women the opportunity to play a variety of intramural sports together in a fun setting. Kickball, Dodgeball, Broomball, 3 v 3 basketball, Volleyball, Whiffle Ball, and other sports will be included. Open to all looking for an enjoyable workout and athletic social interaction. credits, Winter-B. Carlson
139. Karate An art of self-defense which originated in Okinawa. Karate involves mastering techniques, sharpening concentration and refining one's spirit. Karate develops self-confidence and self-discipline while providing a solid workout. Ideally, the Karateka carries a clarity of concentration and serenity of spirit every day in whatever she/he is doing. Beginners are welcome and appreciated. credits, Fall, Winter, Spring—R. Dobrow
140. Beginning Kettlebell Fitness Basic introductory instruction in the use of kettlebells for strength development and aerobic conditioning. This course will have a general fitness focus. credits, Fall, Winter-M. Caron
141. Advanced Kettlebell Fitness This course will review basic kettlebell exercises early in the term but will move quickly into more advanced exercises with an emphasis on enhancing sport performance. credits, Spring—M. Caron
142. Life Guard Training American Red Cross course that encompasses training in aquatic safety and rescue skills. On successful completion of the course, participants will receive two certifications: one for A.R.C. Lifeguard Training (includes First Aid), valid for three years, and the second for A.R.C. C.P.R.
for the Professional Rescuer, valid for one year. In order to be eligible for this course, students must demonstrate competence in the basic swimming strokes (front crawl, breaststroke, and sidestroke), be able to tread water (without use of hands/arms) for two minutes and exhibit an ability to swim under water to depths of at least nine feet. The course is approximately 35 hours in length, with 80 percent of the class time spent in the pool and 20 percent in the classroom. credits, Spring-A. Clark
143. Moving Anatomy This course seeks to provide an underlying awareness of body structure and function. Using movement to expand knowledge of our anatomy will encourage participants to integrate information with experience. Heightened body awareness and class studies are designed to activate the general learning process. credits, Spring—J. Shockley
144. Modern Dance I A physical exploration at the introductory level of the elements of dance: time, motion, space, shape and energy. Students are challenged physically as they increase their bodily awareness, balance, control, strength and flexibility and get a glimpse of the art of dance. credits, Fall, Winter, Spring-J. Howard, Staff
145. Modern Dance II Builds upon the concepts and experiences in Level I with more emphasis on the development of technique and expressive qualities as students are aided in a process of solving movement problems and finding solutions. Movement combinations are more complex and physical demands are challenging. credits, Fall, Winter, Spring-J. Howard
146. Contact Improvisation This is a course in techniques of spontaneous dancing shared by two or more people through a common point of physical contact. Basic skills such as support, counterbalance, rolling, falling and flying will be taught and developed in an environment of mutual creativity. credits, Fall, Winter-J. Shockley
147. Modern Dance III Continues to challenge the dance student with more intensive work on technical, theoretical and expressive movement problems. Since students are more able and experienced, exploration of unusual and intricate forms and movements is possible and the goal of each class is to go as deeply into each idea as the limits of time and ability allow. credits, Winter, Spring-J. Howard, J. Shockley
148. Outdoor Skills for the Backcountry This course will introduce students to many of the skills necessary to survive and thrive in the wilderness. The objective of this course is to prepare students to be able to plan and execute their own backcountry experience with guidance in trip planning, plant and animal identification, first aid, orienteering shelter building, food planning, packing and preparation, and an introduction to group dynamics and leadership. credits, Fall-K. Gudeman
149. Beginning Racquetball This course is designed for beginners and people with very limited experience in racquetball. The focus of this course is on basic skills development and practice. Students are introduced to rules and singles strategy. No experience required. credits, Not offered in 2010-2011
150. Rock Climbing The beginning of the course covers climbing knots, belaying and commands. Efficient movement and climbing styles will also be addressed. The majority of the term will allow students to apply their new skills on the Recreation Center's climbing wall and in the Boulderin Cave. credits, Fall, Winter, Spring-K. Gudeman, Staff
151. Scuba PADI Open Water PADI Open Water SCUBA certification can be earned. A SCUBA class involves three parts: class, pool and open water. Classroom and pool sessions are conducted over six nights at the West Gym classroom and Thorpe Pool. The open water portion (optional for PE activity credit but required for PADI certification) is conducted off campus. Lab fees apply, please contact instructor. credits, Fall, Spring-J. Campion
152. Self Defense for Women Taught by Mary Brandl, a fourth degree Black Belt with the Midwest Karate Association. Course consists of learning basic techniques (kicking, striking, blocking and shifting
moves), analyzing and decision making in a crisis, and the role body language, eye contact and assertiveness can play in threatening and attack situations. There will be controlled practice drills with partners. credits, Fall, Spring-M. Brandl
153. Women's Health \& Fitness This class will explore current fitness, health, and nutrition issues. The first two weeks will be lecture based, followed by weekly introduction of new activities. This course is largely designed for non-athletes who want to learn about fitness and the options available to them on or near Carleton's campus. The goal is to find an activity that will encourage students to engage in daily activity and improve their overall health and well-being. Each term new activities will be introduced that will focus on improving coordination, strength, flexibility and aerobic capacity. credits, Not offered in 2010-2011
154. Social Dance I Provides instruction in basic steps and patterns of ballroom dance such as waltz, cha-cha and swing. No previous experience is needed. Additional opportunities are provided by the Social Dance Club. credits, Fall, Winter, Spring—Staff
155. Social Dance II Provides a progression from the basics and begins to move into more rhythmically advanced dances and speciality moves. Previous experience or completion of Social Dance I is required. credits, Fall, Winter, Spring-Staff
156. Social Dance, Winter Ball Course is completed in five weeks - just in time for mid-winter ball. credits, Winter-Staff
157. Squash, Intermediate This class covers intermediate stroke production, rules and strategies. It is geared toward intermediate-level players with experience who can consistently hit shots to the front and side wall and engage in long rallies. credits, Not offered in 2010-2011
158. Step Aerobics This class begins with a 5-7 minute warm-up and then moves toward a $20-25$ minute straight aerobics routine. Then steps are incorporated into a $20-25$ minute aerobics workout. The remaining class time ends with 5-7 minutes of stretches in which one muscle group is chosen for special emphasis and effort. credits, Fall, Winter, Spring-R. Petricka
159. Swimming, Fitness Designed for the accomplished swimmer who desires a vigorous workout as a means of improving or maintaining cardiovascular fitness. Instruction covers stroke mechanics, drills, use of training equipment and general workout design. Students must have the ability to swim front crawl, backstroke, and breaststroke. credits, Fall, Winter, Spring-A. Clark, B. Larsen
160. Swimming, Instructional Novice to intermediate swim. Introduction to basic swim skills and technique. credits, Fall, Winter, Spring-B. Larsen
161. Swing Dance Provides in-depth instruction in the Lindy Hop, a fun, energetic swing dance that developed from the jazz music of the 1920s and 1930s. Emphasizes lead-follow technique and social dance moves while providing an understanding of the dance's roots. Previous social dance experience is helpful but not required. credits, Winter, Spring-Staff
162. Tae Kwon Do The traditional martial art of Korea. The class meets in conjunction with the Tae Kwon Do Club. Its goal is to strengthen the physical and mental abilities of its members. Tae Kwon Do offers a well-balanced practical approach to training, promoting physical fitness, self control, confidence, leadership, discipline and an understanding of the art of Tae Kwon Do and the Korean culture from which it originated. credits, Fall, Winter, Spring-Staff
163. Table Tennis An introduction to the basics of table tennis. credits, Winter-K. Ramler
164. Tennis, Beginning This is the introductory class for those wanting to learn the game of tennis. Instruction includes basic stroke techniques, basic strategies, rules and scoring. Students must provide their own rackets and suitable shoes. credits, Not offered in 2010-2011
165. Tennis, Intermediate This course is for players who have mastered the basics of the game. Previous experience or Beginning Tennis class required. Instruction in more advanced techniques and strategies for both singles and doubles, as well as match opportunities are provided. Students must provide their own rackets and suitable shoes. credits, Not offered in 2010-2011
166. Tennis, Advanced This course is for students with prior competitive tennis experience at the high school level. Instruction in advanced strategy for singles and doubles will be the focus of the course. In addition, students will play both singles and doubles matches. credits, Not offered in 2010-2011
167. Triathlon Training An excellent preparation for the "Carleton Triathlon" held at the end of May. Students will learn how to effectively train in each of the three traditional sports of triathlon (swim, bike, run). Instruction covers basic training principles, technique development, competitive preparation. This course is open to all levels of experience from novice to advanced. Students must possess a minimal amount of skill and conditioning in the three sports prior to enrollment. credits, Spring-A. Clark
168. Volleyball, Co-ed Open to all experience levels. It provides an introduction to basic volleyball skills, rules, and offensive/defensive strategies within a structure that provides both skill practice and scrimmage opportunities. There is an emphasis on teamwork and social interaction. credits, Fall, Spring—Staff
169. Water Safety Instructor American Red Cross certification course for those wishing to teach swimming and water safety classes. In order to be eligible to participate in this course, students must pass a precourse written test and skills test. The written test and skills test are based on a proficiency level equal to the American Red Cross Community Water Safety course and Level VI of the American Red Cross Learn to Swim Program. Although not mandatory, all instructor candidates should have current certification in first aid and CPR. This course requires time outside of class for teaching experiences. Certification is acquired by successfully passing all written tests and skillful demonstration of all required aquatic skills. credits, Spring-A. Clark
170. Winter Sports Fitness This course is designed to introduce students to winter sport and fitness activities. Nordic skiing, snowshoeing, skating, broomball, and all other sports will be included. Open to all looking for an enjoyable workout and athletic social interaction. credits, Winter-B. Carlson
171. Weight Training, Beginning The focus of this course is introduction to the basics of resistance training including a variety of machines, simple free weight and free hand activity. The course is designed for those students with little or no weight training experience. Perfection of basic techniques, strength assessment and personalized programming are ultimate goals of the course. credits, Winter-A. Rushing
172. Weight Training and Conditioning The focus of this course is to assist students with developing a complete conditioning program, including resistance training, running (speed and endurance), agility, stretching (dynamic and static), proper nutrition and appropriate rest intervals. The instructor will assist students in the proper application of specific exercises and drills to maximize effectiveness of their conditioning program. credits, Winter, Spring-L. Lunder
173. Weight Training for Women This class is designed to introduce women students to the weight training facilities in a smaller group setting. Women students will learn to set up weight training programs based on physical assessment done at the beginning of the course and the students individual goals. Introduction technique and training principles are given as well as basic nutritional, health and wellness information. credits, Not offered in 2010-2011
174. Yoga Learn the basics of a variety of hatha yoga styles. Appropriate for all levels, this class will focus on a variety of seated, standing and balancing postures as well as core strength and breathwork. credits, Fall, Winter, Spring—L. Grady-Schweich, F. Hagstrom, Staff
175. Baseball Intercollegiate, Men credits, Spring-A. Rushing
176. Basketball Intercollegiate, Men credits, Winter-G. Kalland
177. Basketball Intercollegiate, Women credits, Winter-C. Kosiba
178. Cross Country Intercollegiate, Men credits, Fall—D. Ricks
179. Cross Country Intercollegiate, Women credits, Fall-D. Ricks
180. Cycling Club credits, Spring—Staff
181. Field Hockey Club, Co-ed credits, Fall—Staff
182. Football Intercollegiate credits, Fall-K. Ramler
183. Ultimate Frisbee Club, CUT and GOP credits, Spring—Staff
184. Ultimate Frisbee Club, Syzygy and Eclipse credits, Spring—Staff
185. Golf Intercollegiate, Men credits, Fall, Spring-G. Ericksen
186. Golf Intercollegiate, Women credits, Fall, Spring-E. Seiger
187. Ice Hockey Club, Men credits, Winter-Staff
188. Ice Hockey Club, Women credits, Winter—Staff
189. Lacrosse Club, Men credits, Spring—Staff
190. Lacrosse Club, Women credits, Spring—Staff
191. Rugby Club, Men credits, Spring-Staff
192. Rugby Club, Women credits, Spring—Staff
193. Sailing Club credits, Spring—Staff
194. Nordic Ski Club credits, Winter—Staff
195. Alpine Ski Club credits, Winter—Staff
196. Soccer Intercollegiate, Men credits, Fall-B. Carlson
197. Soccer Intercollegiate, Women credits, Fall-K. Gudeman
198. Softball Intercollegiate, Women credits, Spring—A. Erickson
199. Swimming/Diving Intercollegiate, Men credits, Winter-A. Clark
200. Swimming/Diving Intercollegiate, Women credits, Winter-A. Clark
201. Synchronized Swim Club credits, Not offered in 2010-2011
202. Tennis Intercollegiate, Men credits, Fall, Winter, Spring—S. Zweifel
203. Tennis Intercollegiate, Women credits, Winter, Spring-L. Battagalini
204. Tennis Club credits, Spring-Staff
205. Track and Field/Indoor Intercollegiate, Men credits, Winter—D. Ricks
206. Track and Field/Indoor Intercollegiate, Women credits, Winter—D. Ricks
207. Track and Field/Outdoor Intercollegiate, Men credits, Spring—D. Ricks
208. Track and Field/Outdoor Intercollegiate, Women credits, Spring—D. Ricks
209. Volleyball Club, Men credits, Winter—Staff

## 291. Volleyball Intercollegiate, Women credits, Fall—H. Jaynes

## 293. Water Polo Club credits, Spring—Staff

310. First Aid and CPR An introduction to basic methods useful in the treatment of injuries and sudden illness. Course content involves both theoretical information and practical physical skills. Red Cross Community First Aid and CPR Certification is given upon successful completion. This course does not apply toward required PE activity courses for graduation. 1 credits, $S / C R / N C, N D ; N E$, Not offered in 2010-2011
311. Principles of Athletic Training Introduction to human anatomy as it pertains to athletic training and prevention and care of athletic injuries. Consists of lecture, practical experiences, and use of rehabilitative modalities. Requirement for athletic training student assistant. 2 credits, ND; NE, Winter, Spring-C. Alladin
312. Principles of Athletics An examination of athletics and their relationship to society. This course focuses on the emergence of contemporary sport and the current issues facing participants, coaches, administrators, and spectators. A special emphasis is placed on understanding the motivating factors behind sport and developing a philosophy of sport that will help students evaluate current sporting issues in society. 6 credits, ND; SI, Not offered in 2010-2011
313. Methods: Principles and Philosophy of Coaching This course emphasizes the methods of teaching skills, structure, and strategies of team oriented sports. Emphasis is placed on understanding the coaching profession at different levels, developing coaching skills and creating a philosophy of coaching. 3 credits, ND; SI, Winter—Staff

## PHYSICS AND ASTRONOMY

Chair: Professor Joel Weisberg<br>Professors: Cynthia A. Blaha, Nelson Lloyd Christensen, Jr., William J. Titus, Joel M. Weisberg<br>Associate Professor: Arjendu K. Pattanayak<br>Assistant Professors: Marty Baylor, Melissa A. Eblen-Zayas, Dwight Luhman<br>Visiting Assistant Professors: Sarah McDowell, John Wilfred Weiss<br>Visiting Assistant Professor: William C. Egbert

Consonant with the liberal arts nature of Carleton, our department serves not only physics and astronomy majors but also other science majors requiring a background in physics or astronomy, and non-science majors desiring an introduction to these subjects. We have goals for the knowledge we would like students to acquire, the skills they should master, and the experiences they should have in learning and doing physics. For example, some of the general skills are the ability to communicate clearly in written work and oral presentation; the ability to locate information through library research and other means; and the ability to continue learning on a largely independent basis. More specific skills include logical problem-solving and mathematical analysis, experimental design and the use of measurement apparatus, and the use of computers for modeling physical phenomena and for data acquisition and analysis.

## Requirements for a Major

Prospective physics majors are strongly encouraged to begin their study of physics and mathematics in the first year. Physics courses are somewhat sequential and are developed in close association with mathematics courses. The curriculum provides an excellent basis for graduate study in physics, astronomy, and in various fields of engineering, and for careers in high-school teaching, industry, and other areas.

Required courses for the major are Physics 151 or 152 and 131 or 132 or 141 or 142, 228, 229, 230, 235, 336 and 339, 342, and 400, plus one applied physics course. (Choose from the following applied courses: Physics 234, 260, 261, 341, 343, 344 or 354; Astronomy 232 or 233: or others upon consultation with the department.) Required math courses are Mathematics 111, 121, 211, and 232. Additional courses that are often recommended include Physics 123, 223, 336, 350, 352, 340, 356, Astronomy 113, 356, Chemistry 123, Mathematics 241, 341, 351, and Computer Science 111.

Major Under Combined Plan in Engineering (See Engineering in index):
In addition to completing the requirements for the physics major listed above, the student should also take the following courses required for admission to the engineering schools: Mathematics 241, Chemistry 123, 230, and Computer Science 111.

## Physics Courses (PHYS)

120. Revolutions in Physics The structure and development of key concepts in physics. In particular, we will examine the Newtonian synthesis, Einstein's theory of relativity, quantum mechanics and chaotic dynamics. We will see how the various developments alter our perspective on our relationship with the material universe. We will also consider the role of social context, creativity, aesthetics, and tradition in scientific discovery. No mathematical background beyond high-school algebra will be assumed. Occasional laboratory work. Not open to students majoring in mathematics or the natural sciences or to students who have taken Physics 131, 132, 141, 142, 151, 152, 153, 161 or 162.6 credits, MS; NE, QRE, Spring—J. Weiss
121. What Physicists Do A program of five lectures by invited speakers that is intended to give students some perspective on the kinds of work done by people with a physics background. Visitors from industry, government, business, and research and educational institutions will discuss their work and work-related experiences. Prerequisite: Physics 131, 132, 141, 142, 151, 152, 153, 161 or 162. 1 credits, S/CR/NC, ND; NE, Spring—J. Weiss
122. Introduction to Physics: Newtonian Mechanics An introduction to classical mechanics using the Newtonian worldview. The kinematics and dynamics of some simple systems including objects in free fall, simple harmonic motion, planetary motion, and the motion of charged particles in electromagnetic fields are investigated using Newton's laws, vector analysis, and the conservation laws of linear momentum, angular momentum, and energy. Comfort with algebra and the integration and differentiation of elementary functions is assumed. Weekly laboratory work. Not open to students who have completed Physics 132, 141, or 142 at Carleton. Prerequisite: Mathematics 111.3 credits, $M S$; $L S$, QRE, Fall, Winter, Spring-M. Baylor, D. Luhman
123. Introduction to Physics: Gravity and the Earth An introduction to the basic principles of Newtonian mechanics and conservation laws using the earth and the gravitational force law as a conceptual framework. The many influences of gravity on the structure of the earth from its shape to the tides, and techniques for measuring gravity will be discussed. Comfort with algebra and the integration and differentiation of elementary functions is assumed. Weekly laboratory. Not open to students who have completed Physics 131, 141 or 142 at Carleton. Prerequisite: Mathematics 111. 3 credits, $M S$; $L S$, QRE, Spring-S. McDowell
124. Introduction to Physics: Gravity and the Cosmos An introduction of basic principles of physics in the realm of planetary systems, black holes and dark matter in the universe. Gravity, conservation of energy and momentum will be used to explore large-scale phenomena in the cosmos. Comfort with algebra and the integration and differentiation of elementary functions is assumed. Weekly laboratory or observational work. Not open to students who have completed Physics 131, 132, or 142 at Carleton. Prerequisites: Mathematics 121 or 131 (completion or concurrent registration) and strong preparation in Newtonian Mechanics. 3 credits, MS; LS, QRE, Winter-C. Blaha
125. Introductory Mechanics: Matter and Interactions An introduction to Newtonian mechanics using calculus. The kinematics and dynamics of objects in motion are investigated using Newton's laws and related conservation laws. Examples of systems studied include table-top objects, simple astronomical systems, or objects in harmonic motion. This section emphasizes a bottom-up atomic perspective and introduces a computational approach to allow the consideration of atoms and molecules inside solids as well. Weekly laboratory or computational work. Not open to students who have completed Physics 131, 132, or 141 at Carleton. Prerequisite: Mathematics 121 or 131 (completion or concurrent registration) and strong preparation in physics. 3 credits, MS; LS, QRE, Fall—S. McDowell
126. Introduction to Physics: Relativity and Particles An introduction to principles of physics in the domain of the very small and very fast. Topics include the special theory of relativity, and selected applications to atomic, nuclear, and particle physics. Comfort with algebra and the integration and differentiation of elementary functions is assumed. Weekly laboratory work. Prerequisites: Mathematics 121 or 131 and Physics 131 or 132 or 141 or 142. 3 credits, MS; LS, QRE, Fall, Winter, Spring-M. Baylor, J. Weisberg, Staff
127. Introduction to Physics: Environmental Physics An introduction to principles of physics and their application to the environment. Topics include energy and its flows, engines, energy efficiency, energy usage and conservation in vehicles and buildings, the atmosphere, and climate change. Comfort with algebra and the integration and differentiation of elementary functions is assumed. Weekly laboratory work or field trips. Prerequisites: Mathematics 111 (completion or concurrent registration) and Physics 131 or 132 or 141 or 142 (or their equivalents). 3 credits, MS; LS, QRE, Spring-J. Weiss
128. Fluid and Waves A study of the properties of fluids (both static and dynamic) and the principles of waves and wave motion (including both sound and light). Topics include simple harmonic motion, buoyancy and Archimedes' principle, Bernoulli's equation, viscosity, Poiseuille's equation, standing waves, musical instruments, and the Doppler effect. One laboratory per week. Prerequisite: Physics 131 or 132 or 141 or 142 and Mathematics 111.3 credits, MS; LS, QRE, Spring-S. McDowell
129. Electricity, Magnetism \& Circuits A study of the principles of electricity, magnetism and circuits with an emphasis on applications to physical measurements. Topics include electric charge, fields, potentials and currents, magnetic fields, Maxwell's equations, and DC and AC circuits. Provides the physical background to effectively use and understand a variety of laboratory instruments. Designed for science majors who want additional background in physics. Comfort with algebra and the integration and differentiation of elementary functions is assumed. One laboratory per week. Prerequisites: Physics 131 or 132 or 141 or 142 , Mathematics 121 or 131.3 credits, MS; LS, QRE, Winter-M. Baylor
130. Light and Optics A study of the principles of light and optics with an emphasis on applications in astronomy, laser physics, and medicine. Topics include geometric and wave optics, lenses and mirrors, telescopic and microscopic observational tools, and the physics of the eye. The course provides the physical background to effectively use a variety of laboratory instruments. Designed for science majors who want additional background in physics. One laboratory per week. Prerequisites: Physics 131 or 132 or 141 or 142, Mathematics 121 or 131. 3 credits, MS; LS, QRE, Winter-M. Baylor
131. Presentation Skills in Physics Designed to help students improve their skills in oral and visual presentation of scientific topics. The course will begin with readings and discussion of effective oral presentation skills. Students will report on physics-related topics of their choice (e.g., their previous summer's research, or a topic studied in another course). Prerequisite: Physics 151, 152, 153, 161 or 162. 2 credits, $S / C R / N C$, $N D$; NE, Not offered in 2010-2011
132. Atomic and Nuclear Physics An elementary but analytical introduction to the physics of atoms and nuclei. Topics include the particle aspects of electromagnetic radiation, an introduction to quantum mechanics, the wave aspects of material particles, the structure of atoms, X-ray and optical spectra, instruments of nuclear and particle physics, nuclear structure and elementary particles. One laboratory
per week. Prerequisite: Physics 115 or 151.6 credits, MS; LS, QRE, Fall-D. Luhman
133. Analytical Mechanics An analytical treatment of classical mechanics from a Lagrangian and Hamiltonian standpoint. Equations of motion and their solutions are studied with special emphasis on the harmonic oscillator and central-force problems. Prerequisites: Physics 131, 132, 141, or 142 and Mathematics 211; or permission of the instructor. 3 credits, MS; NE, Winter-J. Weiss
134. Computational Mechanics A numerical treatment of classical mechanics concentrating on examples which are difficult, if not impossible, to solve analytically. Topics may include examples from astrophysics and chaotic dynamics. Prerequisite: Physics 229. 3 credits, MS; NE, Winter-J. Weiss
135. Astrophysics I Crosslisted with ASTR 232. A study of stellar structure and evolution with an emphasis on the physical principles underlying the observed phenomena. Topics include the birth, evolution, and death of stars, pulsars, black holes, and white dwarfs. Prerequisites: Physics 228 and Physics 229/230 or permission of the instructor. 6 credits, MS; NE, QRE, Offered in alternate years, Spring
136. Astrophysics II Crosslisted with ASTR 233. A study of galactic and extragalactic astronomy with an emphasis on the physical principles underlying the observed phenomena. Topics include the structure and dynamics of the Milky Way Galaxy and other galaxies, the interstellar medium, quasars and active galaxies, clusters and superclusters, and cosmology. Prerequisite: Physics 228 and 229/230 or permission of the instructor. 6 credits, MS; NE, QRE, Offered in alternate years, Spring-C. Blaha
137. Computer Simulations in Complex Physical Systems The development of techniques to study complex physical systems, both probabilistic and deterministic, using numerical simulations. Some of the systems to be investigated are random walks, percolation clusters, the Ising model, avalanches, traffic flow, and the spread of forest fires. Prerequisite: Physics 131, 132, 141, or 142 and one year experience with Mathematica. One laboratory and two class meetings per week. 6 credits, $M S ; L S, Q R E$, Not offered in 2010-2011
138. Electricity and Magnetism Electric and magnetic fields in free space, and their interactions with charges and currents. Topics include DC and AC circuits, Maxwells's equations, and electromagnetic waves. Weekly laboratory work. Prerequisites: Physics 151 or 161 and Mathematics 211; or permission of the instructor. 6 credits, MS; LS, QRE, Spring-N. Christensen
139. Digital Electronics A study of the digital electronics involved in computers, ranging from basic logic circuits to microprocessors. Weekly lab. Each student will complete a term paper that will involve projections about future developments in computer electronics, and a lab project that will involve circuit design. Prerequisite: Computer Science 208. 6 credits, MS; LS, QRE, Offered in alternate years, Winter-S. McDowell
140. Materials Science From a simple "Post-It" note to a complex computer microprocessor, modern products derive much of their utility from the structures and properties of their constituent materials. This course will provide a survey of the science of materials including structure (bonding, crystal structure, defects), classes of materials (polymers, ceramics, metals, composites), physical properties (mechanical, electromagnetic, thermal, optical) and techniques for materials characterization. In addition, the technological and societal impacts of materials development will be explored.
Prerequisites: Physics $151,152,153,161$ or 162 or Chemistry 123 or 128.6 credits, $M S, W R ; N E, W R 2$, Offered in alternate years, Winter-M. Eblen-Zayas
141. Medical Physics The course covers the basic concepts of medical physics. Particular attention is paid to electromagnetism, mechanics and nuclear physics when applied to medical and biological phenomena. Topics include medical imaging techniques, nuclear medicine radiation protection, dosimetry, and physics in biology. Students will visit medical imaging facilities. Note that this course is not appropriate for pre-medical, pre-dental or pre-veterinary requirements. Prerequisite: Physics 151,
142. Quantum Mechanics I An examination of the structure of non-relativistic quantum mechanics and how this theory differs from those of classical physics. Topics include the mathematics of Hilbert space, the postulates of quantum mechanics, the motion of a particle in one dimension (including the free particle and the simple harmonic oscillator), the Heisenberg uncertainty principle, and spin. Prerequisite: Physics 228, 229/230 and Mathematics 232. Familiarity with matrix algebra is assumed. 3 credits, MS; NE, Winter-N. Christensen
143. Quantum Mechanics II A study of the principles and applications of non-relativisitic quantum mechanics. Possible topics may include the harmonic oscillator, the hydrogen atom, approximation techniques, and applications to atomic and nuclear physics. Prerequisite: Physics 336.3 credits, MS; NE, Winter-N. Christensen
144. Thermal and Statistical Physics I The fundamentals of classical thermodynamics and statistical mechanics. Topics may include the kinetic theory of gases; energy, entropy, and the laws of thermodynamics; heat engines and refrigerators; the Maxwell-Boltzmann distribution; the physics of efficient energy use as well as the statistical concepts of temperature and entropy. Prerequisites: Physics 228. 3 credits, MS; NE, Fall-J. Weisberg
145. Thermal and Statistical Physics II Applications of the principles of thermal and statistical physics. Topics may include the canonical ensemble and the Boltzmann factor; the Planck, Fermi-Dirac, and Bose-Einstein distributions and their applications to black-body radiation, phonons, and electrons in solids. Prerequisites: Physics 339. 3 credits, MS; NE, Fall-J. Weisberg
146. Waves The analysis of wave phenomena, including normal mode expansions, the wave equation and boundary value problems, and interference, diffraction, and polarization. Applications are made to mechanical, sound, water and electromagnetic waves with particular emphasis on electromagnetism and optics. Prerequisites: Physics 229 and 235, and Mathematics 232. 6 credits, MS; NE, Offered in alternate years, Fall-C. Blaha, S. McDowell
147. Contemporary Experimental Physics A study of experimental techniques and apparatus basic to the measurements which underlie and validate contemporary theories in physics. Topics include electrical measurements, data analysis and statistics, optical and laser techniques, particle detectors, and time coincidence techniques. Applications are made to experiments such as magnetic resonance, Mossbauer and nuclear spectroscopy and laser optics. Class time is devoted to studying the measurement techniques and considering phenomenological models of the effects observed in the laboratory. One laboratory per week. Prerequisite: Physics 228 and 235. 6 credits, MS; LS, QRE, Spring-D. Luhman
148. Electronics A study of the electrical circuits and electronics underlying modern physics instrumentation. Includes an introduction to microprocessor and microcomputer design. Approximately equal emphasis on analog and digital electronics. One laboratory per week. Prerequisite: Physics 235.6 credits, MS; LS, QRE, Offered in alternate years, Not offered in 2010-2011
149. Classical and Quantum Optics A junior/senior level course in classical and quantum optics. Includes the phenomena of interference, diffraction and coherence and quantum optical applications, such as unique statistical states of light or the operation of a laser. Modern applications of these areas are studied through such topics as fiber optics telecommunication, optical data storage, or manipulation of atoms by light. Prerequisites: Physics 235 and Mathematics 232. 6 credits, MS; NE, Offered in alternate years, Not offered in 2010-2011
150. Optics Laboratory This is a laboratory course that will serve as a follow-up to Physics 344, Classical and Quantum Optics. Students will conduct a number of experiments pertaining to optical phenomena. The experiments will display effects pertaining to classical, quantum, and non-linear optics.

The lab will take place once a week for four hours each session. Prerequisite: Physics 344 or permission of the instructor. 2 credits, MS; LS, QRE, Not offered in 2010-2011
350. Advanced Classical Mechanics Lagrangian and Hamiltonian methods including central force motion coupled harmonic oscillators and the study of continuous systems. Prerequisite: Physics 229/230. 3 credits, MS; NE, Fall—J. Weiss
352. Advanced Electricity and Magnetism The classical theory of fields and waves. Electromagnetic theory including Maxwell's equations, radiation and relativity. Prerequisites: Physics 235 and Mathematics 341.6 credits, MS; NE, Spring-M. Baylor
354. Solid State Physics An introduction to the physics of solids. Particular attention is paid to the properties exhibited by atoms and molecules because of their association and regular periodic arrangement in crystals. Topics include crystal structure and diffraction, the reciprocal lattice, phonons and lattice vibrations, thermal properties, free-electron theory and band structure. Prerequisites: Physics 336 or 339. 6 credits, MS; NE, Offered in alternate years, Not offered in 2010-2011
356. Special Project Individual projects in experimental, theoretical, or computational physics. Available projects are often related to faculty research interests or to the development of course-support materials, such as new laboratory exercises. Prerequisite: Permission of the instructor. 2 or 3 credits, S/CR/NC, MS; NE, Fall, Winter, Spring-Staff
400. Integrative Exercise An extensive study of a specific topic in physics, culminating in a 70-minute presentation during winter or spring term. A short background paper and a longer summary paper are also required. Students may arrange to complete the bulk of their work during winter or spring term (Physics 400, 6 credits), or divide their effort between terms (Physics 400, winter, 3 credits; Physics 400, spring, 3 credits). 6 credits, S/NC, ND; NE, Winter, Spring-Staff

## Astronomy Courses

110. Introduction to Astronomy An introduction to current astronomy with an emphasis on how we know what we know. Topics include the solar system; the life cycles of stars; pulsars, quasars, and black holes; and the history and future fate of the universe. No mathematics background beyond high school algebra and trigonometry is assumed. 6 credits, MS; NE, QRE, Fall, Winter-J. Weisberg, J. Weiss
111. Observational and Laboratory Astronomy Theory and practice of basic techniques in observational and laboratory astronomy. Certain problems involve the use of the 16 -inch and 8 -inch telescopes. Prerequisite: Astronomy 110, 232, or 233, and permission of the instructor. 3 credits, S/CR/NC, MS; LS, QRE, Fall, Spring-C. Blaha, J. Weiss
112. Astrophysics I Crosslisted with PHYS 232. A study of stellar structure and evolution with an emphasis on the physical principles underlying the observed phenomena. Topics include the birth, evolution, and death of stars, pulsars, black holes, and white dwarfs. Prerequisites: Physics 228 and Physics 229/230 or permission of the instructor. 6 credits, MS; NE, QRE, Offered in alternate years, Spring
113. Astrophysics II Crosslisted with PHYS 233. A study of galactic and extragalactic astronomy with an emphasis on the physical principles underlying the observed phenomena. Topics include the structure and dynamics of the Milky Way Galaxy and other galaxies, the interstellar medium, quasars and active galaxies, clusters and superclusters, and cosmology. Prerequisite: Physics 228 and 229/230 or permission of the instructor. 6 credits, MS; NE, QRE, Offered in alternate years, Spring-C. Blaha
114. Special Project Individual projects in observational, theoretical, or computational astronomy. Available projects are often related to faculty research interests or to the development of course-support materials, such as new laboratory exercises. Prerequisite: Permission of the instructor. 2 or 3 credits,

## POLITICAL ECONOMY CONCENTRATION

## Director: Associate Professor Greg Marfleet

The study of political economy involves issues that range from the analysis of American Public Policy, globalization, comparative national economic policies, the relationship of micro-level to macrolevel activity, and the ways that public and private choices affect one another.

## Requirements for the Concentration:

Since the study of politics and economics are closely and intimately related, we ask students (1) get a grounding in political science and economics, and perhaps a third discipline, sociology; (2) to specialize in either American Public Policy or World Trade and Development; and (3) to integrate their studies in a final senior seminar that cuts across the different fields of specialization.

Lower Level Course Requirements (four courses required):
All three of the following:
ECON 110 Principles of Macroeconomics
ECON 111 Principles of Microeconomics
POSC 265 Politics of Global Economic Relations (Not offered in 2010-2011)
or
POSC 263 European Political Economy
plus one course from:
ECON 250 History of Economic Ideas (Not offered in 2010-2011)
HIST 141 Europe in the Twentieth Century (Not offered in 2010-2011)
POSC 170 International Relations and World Politics
Middle-Division Requirement (one course required):
The selected course must correspond with area of specialization.
American Public Policy:
ECON 270 Economics of the Public Sector (Not offered in 2010-2011)
POSC 201 National Policymaking
SOAN 220 Class, Power, and Inequality in America
<i>or</i> World Trade and Development:
ECON 240 Microeconomics of Development
ECON 241 Growth and Development
ECON 280 International Trade
ECON 281 International Finance
Upper Level Course Electives (three courses required):
Each student will select at least three courses from the two areas of specialization listed below in consultation with the concentration coordinator. These courses must come from at least two different departments. Two of these courses will be in the same area of specialization with the third coming from the other area. Courses listed under Middle-Division Requirement (above) may also count as upper level course electives if they are not being used to satisfy the Middle-Division Requirement. Political Science 263 may be used to satisfy one upper level elective requirement in the area of World Trade and Development if Political Science 265 was used to satisfy the lower level course requirement. It may not satisfy both requirements simultaneously.

## American Public Policy:

ECON 232 American Economic History: A Cliometric Approach (Not offered in 2010-2011)
ECON 245 Economics of Inequality (Not offered in 2010-2011)

ECON 262 Economics of Sports ((Not offered in 2010-2011)
ECON 270 Economics of the Public Sector (Not offered in 2010-2011)
ECON 271 Economics of Natural Resources and the Environment
ECON 273 Water and Western Economic Development
ECON 274 Labor Economics
ECON 275 Law and Economics
ECON 276 Money and Banking (Not offered in 2010-2011)
ECON 278 Industrial Organization and Pricing Policy (Not offered in 2010-2011)
ECON 282 Investment Finance
POSC Carleton Political Science Seminar in Washington D.C.*
POSC 308 Poverty and Public Policy (Not offered in 2010-2011)
POSC 213/313 Labor Politics in a Global Age (Not offered in 2010-2011)
POSC 366 Urban Political Economy (Not offered in 2010-2011)
SOAN 210 Priciples of Demography
SOAN 215 Social Welfare (Not offered in 2010-2011)
SOAN 220 Class, Power, and Inequality in America
SOAN 221 Law and Society
SOAN 229 Demography of the Family
SOAN 266 Urban Sociology (Not offered in 2010-2011)
SOAN 280 Statistic Tool Reasoning
World Trade and Development:
ECON Carleton Economics Seminar in Cambridge*
ECON 233 European Economic History
ECON 236 Economics of the European Union
POSC 229 International Institutions (Not offered in 2010-2011)
POSC 263 European Political Economy
POSC 268 International Environmental Politics and Policy (Not offered in 2010-2011)
POSC 322 Political Economy of Latin America (Not offered in 2010-2011)
POSC 333 Sustainability Science (Not offered in 2010-2011)
POSC 361 Approaches to Development (Not offered in 2010-2011)
POSC 362 Globalization and the State (Not offered in 2010-2011)
POSC 364 Capitalism and Its Critics
POSC 383 Maastricht Program: Politics of the European Union (Not offered in 2010-2011)
SOAN 224 Global Migrations (Not offered in 2010-2011)
SOAN 234 Ecology, Economy, and Culture
SOAN 239 Exploration of Social Data
SOAN 280 Statistical Tools Reasoning
Upper Level Seminar Requirement: (one course)
POSC 322 Political Economy of Latin America (Not offered in 2010-2011)
POSC 360 Political Economy Seminar
POSC 364 Capitalism and Its Critics
POSC 366 Urban Political Economy (Not offered in 2010-2011)

* selected courses from the off-campus seminar

Participants on the Cambridge program will normally be granted 12 Economics credits under the World Trade and Development division.

## POLITICAL SCIENCE (POSC)

Chair: Professor Richard A. Keiser
Professors: Barbara Allen, Laurence D. Cooper, Roy F. Grow, Richard A. Keiser, Steven G. Poskanzer, Steven E. Schier

Visiting Professor: Burton Levin
Associate Professors: Brian Gregory Marfleet, Alfred P. Montero, Kimberly K. Smith
Assistant Professors: Mihaela Czobor-Lupp, Devashree Gupta, Tun Myint, Carolyn Wong
Political science encompasses the study of governments and international organizations political behavior, public policies, political processes, systems, and theory. It includes American politics, comparative politics, political philosophy, international relations and world politics. The Department's curriculum is designed to cultivate judicious and productive citizenship, as well as provide versatile skills and knowledge. These can be applied to a wide range of fields, including law, business, government, international service, education, journalism, and other fields.

Majors choose between two tracks: Political Science or Political Science/International Relations. Within each of these tracks, students have flexibility to plan their courses of study around subfields of interest.

## Requirements for the Political Science track <br> Sixty-six credits, including:

1. Core Courses (18 credits) Majors are required to complete three of the following core courses prior to their senior year.

POSC 120 Comparative Political Regimes
POSC 122 Politics in America: Liberty and Equality
POSC 160 Political Philosophy
POSC 170 International Relations and World Politics
2. Methods Sequence ( $\mathbf{1 2}$ credits):

MATH 115 Introduction to Statistics or MATH 215 Introduction to Probability and Statistics (6 credits)

POSC 230: Methods of Political Research ( 6 credits) This course should be taken as soon as possible after declaring a major.
3. Elective Courses ( 30 credits in the department): At least two courses ( 12 credits) must be at the 300 -level, and one of these two must be an asterisk * designated seminar. It is recommended that majors take their seminar course during the junior year.

A maximum of 12 credits earned on a non-Carleton off campus studies program may be granted toward the electives requirement. These credits may not be used to replace a core course and should be distinct and independent from electives offered at Carleton. The chair may require a copy of the offcampus course syllabus.
4. Integrative Exercise ( 6 credits total - POSC 400): During their junior or senior year students will revise substantially the final paper from an advanced seminar in political science. (Departmentapproved courses are designated with an asterisk*. Also see separately published list, which does not include courses taken on non-Carleton off-campus programs.)

The professor in the course will act as the student's comps adviser. Usually revision will take place during the term following the seminar and the revision will be completed during that term. However, professors and advisees may mutually define the scope of revision. The integrative exercise will be completed with preparation of a poster for a group poster presentation.

## Requirements for the Political Science/International Relations track

Coordinator: Associate Professor Alfred P. Montero
The International Relations Program was originated in 1937 by the former Secretary of State and

Nobel Peace Prize winner, Frank B. Kellogg, through the establishment at Carleton of the Kellogg Foundation for Education in International Relations.

## Sixty-six credits, including:

1. Core Courses (12 credits): Majors are required to complete the two core courses prior to their senior year, as listed below.

Required:
POSC 170 International Relations and World Politics
Plus one of the following:
POSC 120 Comparative Political Regimes
POSC 122 Politics in America: Liberty and Equality
POSC 160 Political Philosophy
2. Methods Sequence (12 credits):

MATH 115 Introduction to Statistics or MATH 215 Introduction to Probability and Statistics (6 credits)

POSC 230 Methods of Political Research ( 6 credits) This course should be taken as soon as possible after declaring a major.
3. Elective Courses ( 36 credits): Six courses from the following three subfield electives and area studies, subject to the following distribution requirements (May not be taken as $\mathrm{S} / \mathrm{Cr} / \mathrm{NC}$ ):
a) three of these six courses (or 18 credits) must come from the student's main subfield electives list and one ( 6 credits) from another subfield list.
b) One of the six courses must be a non-POSC selection. (May not be taken as S/CR/NC)
c) One of the six courses must be an area studies course (If a non-POSC course, it will also satisfy the (b) requirement.) Approved area studies courses are listed below. Area studies cannot be used as a main subfield.
d) Two of the six courses must be 300 -level courses in the Political Science Department, and one of those two 300-level courses must be an asterisk * designated seminar in the student's main subfield.

It is recommended that majors take their seminar course during the junior year. A course which was listed as fulfilling the International Relations electives requirement at the time the student elected that course, but which has been deleted from the catalog simply because it has not been taught this year or last, will continue to be accepted in fulfillment of the IR requirement.
a) Leadership, Peace and Security

POSC 226 Political Psychology (Not offered in 2010-2011)
POSC 229 International Institutions (Not offered in 2010-2011)
POSC 231 American Foreign Policy
POSC 239 The Diplomat's Craft: Three Case Studies (Not offered in 2010-2011)
POSC 241 Ethnic Conflict
POSC 258 Politics and Ambition
POSC 259 Justice Among Nations (Not offered in 2010-2011)
POSC 289, 293 Washington D.C. Program: Seminar (Not offered in 2010-2011)
POSC 309 The American Presidency*
POSC 326 America's China Policy*
POSC 328 Foreign Policy Analysis* (Not offered in 2010-2011)
POSC 329 Vietnam, Iraq, and American Policy* (Not offered in 2010-2011)
POSC 330 The Complexity of Politics*
POSC 345 Guerillas, Warlords and Bandits: The Art of Asymmetric War* (Not offered in 20102011)

POSC 346 Spies, Rogues and Statesmen: Intelligence and the Formation of Foreign Policy*
POSC 347 America and Its Wars* (Not offered in 2010-2011)

SOAN 236 Introduction to Peace Studies
WGST 234 Feminist Theory
b) Global Development and Sustainability

ECON 240 Microeconomics of Development
ECON 241 Growth and Development
ECON 274 Labor Economics
ECON 275 Law and Economics
ECON 280 International Trade
ECON 281 International Finance
ENTS 271 Environmental Economics and Policy
POSC 213 Labor Politics in a Global Age (Not offered in 2010-2011)
POSC 253 Marxist Political Thought (Not offered in 2010-2011)
POSC 263 European Political Economy
POSC 265 Politics of Global Economic Relations (Not offered in 2010-2011)
POSC 266 Urban Political Economy
POSC 268 International Environmental Politics and Policies (Not offered in 2010-2011)
POSC 313 Labor Politics in a Global Age* (Not offered in 2010-2011)
POSC 322 Political Economy of Latin America* (Not offered in 2010-2011)
POSC 330 The Complexity of Politics*
POSC 333 Sustainability Science* (Not offered in 2010-2011)
POSC 360 Political Economy Seminar*
POSC 361 Approaches to Development* (Not offered in 2010-2011)
POSC 364 Capitalism and Its Critics*
POSC 366 Urban Political Economy*
POSC 381 Beijing Program: Politics of Economic Development (Not offered in 2010-2011)
POSC 382 Beijing Program: Chinese Economics in Transition (Not offered in 2010-2011)
POSC 383 European Political Economy Seminar in Madrid and Maastricht: Politics of the European Union
SOAN 234 Ecology, Economy, and Culture
WGST 239 Transnational Feminisms
WGST 396 Capstone Seminar: Rethinking the Sexual Body
c) Democracy, Society, and the State

POSC 201 National Policymaking
POSC 210 Politics Across Borders (Not offered in 2010-2011)
POSC 215 Political Communication in Comparative Context
POSC 219 Protest, Power \& Grassroots Organizing: American Social Movements
POSC 221 Latin American Politics (Not offered in 2010-2011)
POSC 233 Corruption, Authoritarianism, and Democracy (Not offered in 2010-2011)
POSC 237 Southeast Asian Politics (Not offered in 2010-2011)
POSC 247 Comparative Nationalism
POSC 273 Citizen and Immigration Politics
POSC 281 Global Society: An Approach to World Politics (Not offered in 2010-2011)
POSC 310 Politics Across Borders* (Not offered in 2010-2011)
POSC 319 Protest, Power and Grassroots Organizing: American Social Movements
POSC 323 Cuban Politics Seminar
POSC 330 The Complexity of Politics*
POSC 332 Religion and Politics* (Not offered in 2010-2011)
POSC 355 Identity, Culture and Rights*
POSC 358 Comparative Social Movements*
POSC 362 Globalization and the State* (Not offered in 2010-2011)

POSC 378 Beijing Program: Chinese Social and Political Institutions (Not offered in 2010-2011)
POSC 379 Beijing Program: Chinese Decision Making (Not offered in 2010-2011)
POSC 388 European Political Economy Seminar in Madrid and Maastricht:Spanish Politics and Political Economy
RELG 264 Islamic Politics
RELG 381 Religion and Nationalism (Not offered in 2010-2011)
SOAN 221 Law and Society
SOAN 225 Social Movements
Approved Area Studies Courses
AMST 230 The American Sublime: Landscape, Character \& National Destiny in Nineteenth Century America (Not offered in 2010-2011)
ECON 233 European Economic History
ECON 236 Economics of the European Union
EUST 110 Europe as Idea and Union
HIST 138 The Making of Europe
HIST 139 Foundations of Modern Europe (Not offered in 2010-2011)
HIST 140 Modern Europe 1789-1914
HIST 141 Europe in the Twentieth Century (Not offered in 2010-2011)
HIST 151 History of Modern Japan (Not offered in 2010-2011)
HIST 152 History of Imperial China
HIST 153 History of Modern China
HIST 161 History of Modern India (Not offered in 2010-2011)
HIST 170 Modern Latin America 1810-Present
HIST 180 An Historical Survey of East Africa (Not offered in 2010-2011)
HIST 182 A Survey of Southern African History (Not offered in 2010-2011)
HIST 238 Topics in Medieval History: Church, Papacy and Empire (Not offered in 2010-2011)
HIST 241 Russia through Wars and Revolutions (Not offered in 2010-2011)
HIST 243 The Peasants are Revolting! Society and Politics in the Making of Modern France (Not offered in 2010-2011)
HIST 249 Modern Central Europe
HIST 250 Modern Germany
HIST 254 Colonialism in East Asia
HIST 255 Press and Culture in East Asia
HIST 260 The Making of the Modern Middle East (Not offered in 2010-2011)
HIST 262 Post-colonial South Asia, 1947-Present (Not offered in 2010-2011)
HIST 265 Central Asia in the Modern Age (Not offered in 2010-2011)
HIST 266 History of Islam in India
HIST 272 The Emergence of Modern Mexico
HIST 278 Religious Orthodoxy and Deviance in New Spain
HIST 360 Muslims and Modernity (Not offered in 2010-2011)
HIST 386 Disease, Health, and Healing in Modern African History (Not offered in 2010-2011)
LTAM 200 Issues in Latin American Studies
POSC 210 Politics Across Borders (Not offered in 2010-2011)
POSC 221 Latin American Politics (Not offered in 2010-2011)
POSC 237 Southeast Asian Politics (Not offered in 2010-2011)
POSC 310 Politics Across Borders* (Not offered in 2010-2011)
SOAN 250 Ethnography of Latin America (Not offered in 2010-2011)
SOAN 256 Ethnography of Africa (Not offered in 2010-2011)
SOAN 261 Imagining Indonesia: Pluralism and Unity
SOAN 284 Anthropology of China (Not offered in 2010-2011)

SOAN 286 Anthropology of East Asia (Not offered in 2010-2011)
4. Integrative Exercise (Total of 6 credits - POSC 400): During their junior or senior year, students will revise substantially the final paper from an advanced seminar in international relations. (Department-approved courses are designated with an asterisk*. Also see separately published list, which does not include courses taken on non-Carleton off-campus programs.)

The professor in the course will act as the student's comps adviser. Usually revision will take place during the term following the seminar and the revision will be completed during that term. However, professors and advisees may mutually define the scope of revision. The integrative exercise will be completed with preparation of a poster for a group poster presentation.
5. Study Abroad: We recommend study in a Carleton College Off-Campus or non-Carleton program that includes a significant political component. This may include study in our Beijing or Madrid/Maastricht programs, or the Washington D.C. program, especially if the internship taken during the Washington program includes an international organization issue.

A maximum of 12 credits earned on a non-Carleton off campus studies program may be granted toward the electives requirement. These credits may not be used to replace a core course and should be distinct and independent from electives offered at Carleton. The chair may require a copy of the offcampus course syllabus.

## Political Science and International Relations Courses

120. Comparative Political Regimes An introduction to the fundamentals of government and the variety of ways politics is practiced in different countries. Capitalist democracies, transitional states and developing nations are compared. 6 credits, SS, WR; SI, WR2, IS, Fall, Spring-D. Gupta, A. Montero
121. Politics in America: Liberty and Equality An introduction to American government and politics. Focus on the Congress, Presidency, political parties and interest groups, the courts and the Constitution. Particular attention will be given to the public policy debates that divide liberals and conservatives and how these divisions are rooted in American political culture. 6 credits, SS; SI, IDS, QRE, Fall, WinterR. Keiser, S. Schier
122. Political Philosophy Introduction to ancient and modern political philosophy. We will investigate several fundamentally different approaches to the basic questions of politics---questions concerning the character of political life, the possibilities and limits of politics, justice, and the good society---and the philosophic presuppositions (concerning human nature and human flourishing) that underlie these, and all, political questions. 6 credits, SS; HI, Fall, Winter, Spring-L. Cooper, M. Czobor-Lupp
123. International Relations and World Politics A survey of factors in international relations of a geopolitical, commercial and ideological character; systems of international relations, including bipolar deterrence, polycentrism, and international organization; and dynamics of international relations, including war, diplomacy, and international economic and social development. 6 credits, $S S, W R$; SI, WR2, IS, Winter, Spring-R. Grow, G. Marfleet
124. National Policymaking This course will examine how and by whom ideas are brought to the national political agenda and how they are kept off, the processes by which policy solutions are considered, the formulation of legislation and the reasons for success and failure, and policy implementation. We will mix theory with a variety of policy case studies, such as tax reform policy and health care policy. Prerequisite: Political Science 122 or sophomore standing. 6 credits, SS; SI, IDS, Fall-R. Keiser
125. Parties, Interest Groups and Elections Examination of the American electoral system and its components: parties, interest groups and the media. The impact of parties and interests on national policy making is also explored. The course will devote special attention to the 2008 and 2010 elections. 6 credits, SS; SI, IDS, Fall-S. Schier
126. Political Communication: Election Campaign Advertising and Public Opinion* Crosslisted with POSC 303. How does political advertising influence the electorate? Do "negative ads" turn voters off? Can advertising be used strategically to influence turnout, decreasing the participation of one of the major parties, while increasing the likelihood that others will vote? Election ads along with the six second "sound bite" are now among the major forms of political communication in modern democracies. We will study how ads are created and "work" from the standpoint of political psychology and film analysis. The course includes a research experience. 6 credits, SS; LA, QRE, Not offered in 2010-2011
127. Media and Electoral Politics: 2010 United States Election Our analysis of media influences on politics will draw from three fields of study: political psychology, political behavior and participation, and public opinion. Students will conduct a study of the effects of campaign ads and news in the 2008 election, 2010 election, and health care initiatives in the Obama administration, using content analysis and other research methods. 6 credits, SS; SI, QRE, Offered in alternate years, Fall-B. Allen
128. Issues in American Democracy Is direct citizen rule through participatory democracy or a reliance on policymaking by officeholders the best way to govern America? This seminar addresses the question by examining several topics--the levels of political knowledge and interest among the public, the impact of interest groups in national government, and the operation of popular rule through initiatives and referendums in American states. 6 credits, SS; SI, Spring-S. Schier
129. The American Courts We will explore the political and institutional dimensions of courts, and consider whether and how judicial decision making differs from political decision making. Topics will include legal reasoning and the role of the judge, the institutional capacity of courts and their relation to the political branches, and the role of lawyers in the political system. 6 credits, SS, WR; SI, WR2, Fall-

## K. Smith

207. Urban Politics in a Global Era Are cities microcosms of state or nation? How has the role of immigrant-port-of-entry affected the politics of cities? What has been the impact of population shift to the suburbs? Are African-Americans and Latinos fighting over an inconsequential hole-in-the-doughnut in Chicago and Los Angeles? What is the significance of living wage and gay rights movements in cities? Why do European and American cities seem so different, and are there signs of convergence in the era of globalization? 6 credits, SS; SI, IS, Not offered in 2010-2011
208. Politics Across Borders Crosslisted with POSC 310. We live in an age of interdependent national economies. The costs of international travel and communication have declined in recent decades. Do the international political economy and modern technology make it easier for political actors in civil society to extend the reach of their influence across borders? Does the transmission of cultural ideas and practices across borders change the nature of domestic politics? In examining these questions, we will pay particular attention to the politics of human rights, migration, refugees, and labor in the advanced industrial democracies. 6 credits, SS; SI, IS, Not offered in 2010-2011
209. Environment and the Evolution of Rules: Designing Institutions to Solve Political Problems How can we design democratic institutions to deal with environmental and social problems? Are there universal approaches to solving political problems in physically and socially diverse communities? Do people come up with different institutional ways to address shared problems because of environmental or cultural differences? By examining basic principles of institutional design you will learn how to analyze constitutions, public policies, international treaties, and other "rule ordered relationships" that different people have created to deal with environmental concerns and, generally, the health and welfare of their communities. 6 credits, SS; SI, Not offered in 2010-2011
210. Environmental Justice The environmental justice movement seeks greater participation by marginalized communities in environmental policy, and equity in the distribution of environmental harms and benefits. This course will examine the meaning of "environmental justice," the history of the movement, the empirical foundation for the movement's claims, and specific policy questions. Our
focus is the United States, but students will have the opportunity to research environmental justice in other countries. 6 credits, SS; SI, IS, Winter-K. Smith
211. Labor Politics in a Global Age Crosslisted with POSC 313. How are American unions coping with globalization? As capital mobility puts growing pressures on unions, how are United States labor institutions changing at the national, local, and workplace level? The course compares wage-bargaining institutions and the political representation of unionized labor in North America, Western Europe, and East Asia. Topics include the politics of job loss; the informal economy; gendered labor; and the stance of unions on issues of migration and race. 6 credits, SS; SI, IS, Not offered in 2010-2011
212. Visual Representations of Political Thought and Action Visual media offer an alternative method of framing political ideas and events. Images found in such texts as film, posters, and even in statistical tables can enlighten--or mislead. Readings in visual theory, political psychology, and graphic representation will enable you to read images and use these powerful media to convey your ideas and research. 3 credits, SS; LA, QRE, Spring-B. Allen
213. Political Communication in Comparative Context This five-week course will focus on the major theories of political communication in an election context. Our case study will be the United Kingdom elections, which are expected to occur around May 6, 2010. Students who enroll for this course concurrently with POSC 204 on United States elections will have an opportunity to compare the legal and cultural contexts of election news coverage and advertising in the United Kingdom and United States. 3 credits, SS; SI, IS, QRE, Offered in alternate years, Fall-B. Allen
214. The Initiative, Referendum and Public Policy Crosslisted with POSC 316. This course focuses on the direct democracy tools of initiative and referendum. What are the origins of these institutions and in what historical circumstances do citizens turn to them? Policy conflicts over gay marriage, regulation of tobacco, financing of sports stadiums, and the externalities of economic development will be among our topics. 6 credits, SS; SI, IDS, Not offered in 2010-2011
215. Schools, Scholarship and Policy in the United States What can scholarship tell us about educational strategies to reduce achievement gaps and economic opportunity? Do the policies promoted at the city, state and federal levels reflect that knowledge? How are these policies made? What is the relationship between schools and the economic class, racial composition and housing stock of their neighborhoods? Prerequisite: Sophomore Standing. 6 credits, SS; SI, IDS, Offered in alternate years, Winter-R. Keiser
216. Protest, Power \& Grassroots Organizing: American Social Movements Crosslisted with POSC 319. Why do protest movements form and who joins? How do grassroots movements achieve their aims? This class examines the strategies of grassroots political actors as they organize protest movements in civil society, forge coalitions, and give a voice to the voiceless. Comparisons are drawn between the United States, European, Asian, and Latin American experiences. 6 credits, SS; SI, IDS, Winter-C. Wong
217. Politics and Political History in Film How do representations of politics in film influence our ideas about governance, citizenship, power, and authority? How do film and TV reflect values and beliefs of democratic society, particularly in the United States? These are two questions that we will consider in the course as we study films representing politics and historical events in fiction and nonfiction genres for entertainment and education. Films to be analyzed include: Battle of Algiers, Fog of War, Cape Fear (1963), Manchurian Candidate (1960), Advise and Consent, All the President's Men, Primary, War Room, The Mushroom Club, Fahrenheit 9/11, When the Levees Broke. 6 credits, SS; LA, IS, Winter-B. Allen
218. Latin American Politics Comparative study of political institutions and conflicts in selected Latin American countries. Attention is focused on general problems and patterns of development, with some
emphasis on United States-Latin American relations. 6 credits, SS; SI, IS, Not offered in 2010-2011
219. Political Psychology This course is an introduction to political psychology, an inter-disciplinary field of study that applies psychological theory and research to the study of politics, as a theoretical alternative to rational choice models. Study will include applying psychological models to elite decision making and to political behavior of ordinary citizens. Topics include personality and political leadership, group processes and foreign policy, theories of information processing and elite decision making, malignant political aggression and punitive politics, altruism and heroic political action, etc. in light of important political issues and events. 6 credits, SS; SI, QRE, Not offered in 2010-2011
220. Agenda Setting through Speeches and Debates Can political speeches like the State of the Union Address really set the agenda for the Congress and the country? How do election campaign speeches set an agenda and control the discourse among journalists, citizens, and candidate? What about campaign debates? Do they set an agenda for candidate and country? What do debates and speeches reveal about the political psychology of candidates and office holders: about how they process information and make decisions. These are a few of the questions we will address in our survey of political psychology and communication literature. 6 credits, SS; SI, QRE, Not offered in 2010-2011
221. International Institutions Intergovernmental organizations (IGOs), nongovernmental organizations (NGOs), and citizens are all entities that shape the governance of international and global issues. This course focuses on both international organizations (IOs) and international institutions that include formal treaties and informal rules, norms, and strategies. We will study key theoretical concepts and analytical frameworks through case studies and the literature on formal organization and collective action. 6 credits, SS, WR; SI, WR2, IS, QRE, Not offered in 2010-2011
222. Methods of Political Research An introduction to research method, research design, and the analysis of political data. The course is intended to introduce students to the fundamentals of scientific inquiry as they are employed in the discipline. The course will consider the philosophy of scientific research generally, the philosophy of social science research, theory building and theory testing, the components of applied (quantitative and qualitative) research across the major sub-fields of political science, and basic methodological tools. Intended for majors only. Prerequisite: Mathematics 115 or 215.6 credits, ND, WR; SI, WR2, QRE, Winter, Spring-G. Marfleet, C. Wong
223. American Foreign Policy An introduction to the actors and processes of American foreign policymaking and to the substance of American foreign policy. The course aims to provide students with an understanding of how knowledge of the past, the global policy environment, the processes of foreign policymaking, and the specifics of a foreign policy issue come together to help determine modern American foreign policy. The course will review the structure of the international system of states, state power and interests, the historical context of American foreign policy, actors in American foreign affairs, models of foreign policy decision making, and the instruments of foreign policy. Prerequisite: Political Science 122 highly recommended. 6 credits, SS; SI, Spring-G. Marfleet
224. Corruption, Authoritarianism, and Democracy After three decades of democratization, most countries are democratic. But the quality of these democracies is questionable as many suffer from continuous problems of corruption, poor elite accountability, human rights violations, and even policies that can only be described as semi-authoritarian. This course investigates the classic regime types (totalitarianism, authoritarianism, democracy), transitions between them, and the problems of deviations from democratic norms and processes. Special attention will be paid to problems of democratic governance such as electoral fraud, campaign finance malfeasance, the corruption of the judiciary, political violence, and violations of human and civil rights. 6 credits, SS; SI, IS, QRE, Not offered in 2010-2011
225. Southeast Asian Politics This course will cover key thematic issues of Southeast Asian politics, including the challenges of democracy, regional integration, environmental politics, the rise of the power
of non-state actors, and struggles for citizen-sovereignty of the people. We will examine these frontier issues against the background of Southeast Asia's societal evolution through kingdoms, colonial eras, emergence of nation-states, and the influence of globalization on politics. 6 credits, $S S, W R ; S I, W R 2, I S$, QRE, Not offered in 2010-2011
226. The Diplomat's Craft: Three Case Studies Diplomacy is the means by which states find common ground and resolve differences. Former ambassador Burt Levin uses three cases studies from his career to evaluate the relationships between diplomacy and policy implementation. 3 credits, SS; SI, IS, Not offered in 2010-2011
227. Ethnic Conflict Ethnic conflict is a persistent and troubling challenge for those interested in preserving international peace and stability. By one account, ethnic violence has claimed more than ten million lives since 1945, and in the 1990s, ethnic conflicts comprised nearly half of all ongoing conflicts around the world. In this course, we will attempt to understand the conditions that contribute to ethnic tensions, identify the triggers that lead to escalation, and evaluate alternative ideas for managing and solving such disputes. The course will draw on a number of cases, including Rwanda, Bosnia, and Northern Ireland. 6 credits, SS; SI, IS, Winter-D. Gupta
228. Comparative Nationalism Nationalism is an ideology that political actors have frequently harnessed to support a wide variety of policies ranging from intensive economic development to genocide. But what is nationalism? Where does it come from? And what gives it such emotional and political power? This course investigates competing ideas about the sources of nationalism, its evolution, and its political uses in state building, legitimation, development, and war. We will consider both historic examples of nationalism, as well as contemporary cases drawn from Europe, the Middle East, Asia, and the United States. 6 credits, SS; SI, IS, Fall-D. Gupta
229. Ancient Political Philosophy In this course we will examine ancient political philosophy through the intensive study of Plato's Republic, perhaps the greatest work of political philosophy ever written. What is morality? Why should a person behave morally? Wouldn't it be more satisfying to be a tyrant? What is the best way of life? What would a perfect society look like? What would be its customs and institutions, and who would rule? What would it demand of us, and would that price be worth paying? These are some of the politically (and personally) vital questions addressed by the book. 6 credits, $S S$; HI, Fall-L. Cooper
230. Modern Political Philosophy Modern political philosophy initiated many of the ways of thinking about politics that remain salient today: balancing individuality and community; negotiating liberty and equality; and questioning the relationship of politics and morality. In this course we will focus on the Continental tradition of modern political philosophy from Kant to Hegel to Marx, which has had particular influence on politics and culture in Europe, Latin America, and China. 6 credits, SS; HI, IS, Not offered in 2010-2011
231. Marxist Political Thought A discussion seminar introducing the economic and political themes in Marxist literature, concentrating on the works of Marx, Engels, Lenin, and Mao. The course looks at theories of economic development, the role of the state, social conflict, political action, and revolution in the writings of each of these thinkers. 6 credits, SS; HI, Not offered in 2010-2011
232. Freedom, Excellence, Happiness: Aristotle's *Ethics* What does it mean to be morally excellent? To be politically excellent? To be intellectually and spiritually excellent? Are these things mutually compatible? Do they lie within the reach of everyone? And what is the relation between excellence and pleasure? Between excellence and happiness? Aristotle addresses these questions in intricate and illuminating detail in the Nicomachean Ethics, which we will study in this course. The Ethics is more accessible than some of Aristotle's other works. But it is also a multifaceted and multilayered book, and one that reveals more to those who study it with care. 6 credits, SS; HI, Offered in alternate years, Winter-L. Cooper
233. Post-Modern Political Thought The thought and practice of the modern age have been found irredeemably oppressive, alienating, dehumanizing, and/or exhausted by a number of leading philosophic thinkers in recent years. In this course we will explore the critiques and alternative visions offered by a variety of post-modern thinkers, including Nietzsche (in many ways the first post-modern), Heidegger, Foucault, and Derrida. 6 credits, SS; HI, Spring-M. Czobor-Lupp
234. Politics and Ambition Is personal ambition a threat to peace and the public good or is it a prod to nobility and heroism? Does it exemplify the opposition between self and society or does it represent their intersection and mutual support---or both? Drawing on literary, philosophical, and historical works this course will take up these and other questions as part of a broad examination of the role of ambition in politics. 6 credits, SS; HI, Spring-L. Cooper
235. Justice Among Nations This course will bring classic works of political philosophy into conversation with the central questions of international relations, questions concerning both the moral basis of power and the character of international politics. Using the thought of Thucydides and Herodotus as our starting point, we will think through problems of contemporary international relations theory in light of these earlier thinkers, attempting to use the lucid thinking of the past to illuminate the present. 6 credits, SS; HI, IS, Not offered in 2010-2011
236. The Political Philosophy of Jean-Jacques Rousseau In this course we will study what Rousseau considered his greatest and best book: Emile. Emile is a philosophic novel. It uses a thought experiment--the rearing of a child from infancy to adulthood--to explore human nature and the human condition, including their political dimensions. Among Emile's themes are natural goodness and the origins of evil; self-love and sociability; the differences and relations between the sexes; citizenship; and the principles of political right. The book also addresses the question of how one might live naturally and happily amid an unnatural and unhappy civilization. 6 credits, SS; HI, Not offered in 2010-2011
237. European Political Economy An introduction to the politics of the European region during the post-World War II period. Students will examine the political conditions that gave impetus to the creation, maintenance, crisis, and decline of Keynesian economic policies, social welfare states, social democratic partisan alliances, and cooperative patterns of industrial relations. The course will examine the rise and reform of the project of European integration. The course will also address the particular problems faced by the East European countries as they attempt to make a transition from authoritarian, command economies to democratic, market-based economies. 6 credits, SS; SI, IS, QRE, Winter-A.

## Montero

265. Politics of Global Economic Relations This course examines the interaction of national politics and international economic activity. Topics include the relationship between national and international finance, global competitiveness, and economic development. Case studies drawn from every continent. 6 credits, SS; SI, IS, QRE, Not offered in 2010-2011
266. Urban Political Economy Crosslisted with POSC.366. City revenue is increasingly dependent on tourism. Cities manufacture identity and entertainment, whether we think of Las Vegas or Jerusalem, Berlin or Bilbao, the ethnoscapes of Copenhagen or the red light district of Amsterdam. As cities compete in the global economy to become playgrounds for a transnational tourist class, what is the role of urban residents? Who governs? Who benefits? Short essays or exams will be required. 6 credits, SS; SI, IS, Spring-R. Keiser
267. International Environmental Politics and Policies International environmental politics and policy is the most prominent field that challenges traditional state-centric ways of thinking about international problems and solutions. This course will cover five arenas crucial to understanding the nature and origin of international environmental problems and policymaking mechanisms: (1) international environmental law; (2) international political orders; (3) human-environment interactions through politics and markets; (4) paradigms of sustainable development; and (5) dynamics of human
values and rules. 6 credits, SS, WR; SI, WR2, IS, QRE, Not offered in 2010-2011
268. Constitutional Law I Covers American constitutional law and history from the founding to the breakdown of the constitution in secession crisis. Extensive attention will be paid to the constitutional convention and other sources of constitutional law in addition to Supreme Court cases. 6 credits, SS; SI, Not offered in 2010-2011
269. Constitutional Law II Covers American constitutional law and history from Reconstruction to the contemporary era. Extensive attention will be paid to the effort to refound the American constitution following the Civil War as manifest in the 13th, 14th, and 15th amendments, and to the successive transformations which the Supreme Court worked in the new constitutional order. Political Science 271 is not a prerequisite. 6 credits, SS; SI, Not offered in 2010-2011
270. Citizen and Immigration Politics This course examines the politics of citizenship and immigration policy in the United States from a comparative perspective. In addition, to the United States case, the class also examines policy in Australia, Britain, Canada, France, and Germany. What foundational political ideals and traditions shape a nation's laws on citizenship and immigration? How do public opinion, political elites, and interest groups affect the path of immigration controversy over time? What effect do national political institutions have on policy-making? In what ways do domestic and foreign policy concerns interact? As more immigrants become citizens, how does their voice and participation alter the public discourse and politics of immigration? 6 credits, SS; SI, IS, Winter- $\boldsymbol{C}$. Wong
271. Identity Politics in America: Ethnicity, Gender, Religion This class explores the goals, forms, and impact of identity politics in America. Groups engage in identity politics when their members collectively strive for recognition for the group's particular culture, history, language, or identity. How do movements concerned with recognition of particular groups define "insiders" and relate to "outsiders"? How do groups define a group interest when memberships are heterogeneous and individuals hold multiple group memberships? To what extent do race-ethnicity, gender, and religion shape people's outlook, values, and political choices in the United States? 6 credits, SS; SI, IDS, FallC. Wong
272. Arendt: Imagination and Politics Imagination, a complex and powerful human faculty, can lead one astray in fantasy/delusion or enlarge power to grasp the different/foreign. We will investigate Hannah Arendt's conception of the political power of imagination, exploring its role, as a device for escaping reality, in generating extreme ideologies (anti-Semitism, racism). We will try to understand how a benign active imagination, essential to political judgment, is possible at all. Readings include fragments of The Origins of Totalitarianism, Eichmann in Jerusalem, The Life of the Mind, and Lectures on Kant's Political Philosophy, and several of Arendt's essays on writers, such as Heine, Kafka, and Brecht. 6 credits, SS; HI, Offered in alternate years, Fall—M. Czobor-Lupp
273. Global Society: An Approach to World Politics One of the features of the Post-Cold War world has been the increased salience of issues such as terrorism, the environment, the influence of transnational corporations, the world-wide AIDS epidemic, the drug trade, and the crisis of refugees. The proliferation of such problems illustrates the limitations of state-centric international relations theory. This course examines new theoretical approaches to global politics that seek to understand how non-state actors and structures influence emerging patterns of global governance. We will debate as a class the extent to which a global society approach to world politics helps us to understand these transnational problems. 6 credits, SS; SI, IS, Not offered in 2010-2011

289, 293. Washington D.C. Program: Seminar A study of national and international political institutions and processes conducted in Washington, D.C. Seminar participants include national and international reporters, foreign diplomats, members of Congress, career civil servants, White House staff, political party leaders, and interest group representatives. Program participants will also earn four
credits from directed reading during the winter break and six credits from a Washington internship, and six credits for the seminar during winter term. Senior political science majors may elect to take this seminar as a 3 credit course along with 3 credits of comps. ( $293 \mathrm{~S} / \mathrm{CR} / \mathrm{NC}$ ) 9 or 12 credits, $\mathrm{S} / C R / \mathrm{NC}$, SS; SI, IDS, Not offered in 2010-2011
303. Political Communication: Election Campaign Advertising and Public Opinion* Crosslisted with POSC 203. How does political advertising influence the electorate? Do "negative ads" turn voters off? Can advertising be used strategically to influence turnout, decreasing the participation of one of the major parties, while increasing the likelihood that others will vote? Election ads along with the six second "sound bite" are now among the major forms of political communication in modern democracies. We will study how ads are created and "work" from the standpoint of political psychology and film analysis. The course includes a research component and students enrolled at the 300 level will conduct more extensive analysis of data for their seminar papers. 6 credits, SS; SI, QRE, Not offered in 20102011
305. Issues in American Democracy* Crosslisted with POSC.205. Is direct citizen rule through participatory democracy or a reliance on policymaking by officeholders the best way to govern America? This seminar addresses the question by examining several topics--the levels of political knowledge and interest among the public, the impact of interest groups in national government, and the operation of popular rule through initiatives and referendums in American states. 6 credits, $S S$; SI, Spring-S. Schier
306. How Race Matters in American Politics* How do the politics of race and ethnicity influence the modern development of American democracy? Problems of inequality and social marginalization. Racial attitudes and progress toward equality from the civil rights movement of the 1960s to the present. The relationship between protest and electoral politics in African American, Latino, and Asian American communities. Mechanisms for representation of racial-ethnic minorities at the national, state, and local levels of government. Controversies over racial-ethnic policy, such as affirmative action and bilingual education. 6 credits, SS, RAD; SI, IDS, Spring-C. Wong
308. Poverty and Public Policy* This course will focus on the causes of urban poverty in the United States and the public policy strategies at the state and federal levels for reducing poverty. 6 credits, $S S$; SI, IDS, Not offered in 2010-2011
309. The American Presidency* A study of the contemporary Presidency, with a focus on the development of the institutional Presidency, presidential personality and the presidency's relations with other structures in the American political system. The equivalent of a large research paper will be among the requirements for this course. 6 credits, SS; SI, IDS, Winter-S. Schier
310. Politics Across Borders* Crosslisted with POSC.210. We live in an age of interdependent national economies. The costs of international travel and communication have declined in recent decades. Do the international political economy and modern technology make it easier for political actors in civil society to extend the reach of their influence across borders? Does the transmission of cultural ideas and practices across borders change the nature of domestic politics? In examining these questions, we will pay particular attention to the politics of human rights, migration, refugees, and labor in the advanced industrial democracies. 6 credits, SS; SI, IS, Not offered in 2010-2011
311. Topics in Constitutional Law* This seminar will explore selected themes in constitutional law, examining the historical development of doctrine, the philosophical issues raised by the issues and the contemporary political controversies surrounding the Court's decisions. Topics may include the separation of church and state, freedom of speech, reproductive rights, criminal justice, voting rights, and gender and sexuality in the law. Prerequisite: One of the following: Political Science 206, 271 or 272.6 credits, SS; SI, Winter-K. Smith
313. Labor Politics in a Global Age* Crosslisted with POSC 213. How are American unions coping with globalization? As capital mobility puts growing pressures on unions, how are United States labor institutions changing at the national, local, and workplace level? The course compares wage-bargaining institutions and the political representation of unionized labor in North America, Western Europe, and East Asia. Topics include the politics of job loss; the informal economy; gendered labor; and the stance of unions on issues of migration and race. 6 credits, SS; SI, IS, Not offered in 2010-2011
316. The Initiative, Referendum and Public Policy* Crosslisted with POSC.216. This course focuses on the direct democracy tools of initiative and referendum. What are the origins of these institutions and in what historical circumstances do citizens turn to them? Policy conflicts over gay marriage, regulation of tobacco, financing of sports stadiums, and the externalities of economic development will be among our topics. Students will be required to write a research paper. 6 credits, SS; SI, IDS, Not offered in 2010-2011
319. Protest, Power and Grassroots Organizing: American Social Movements Crosslisted with POSC.219. Why do protest movements form and who joins? How do grassroots movements achieve their aims? This class examines the strategies of grassroots political actors as they organize protest movements in civil society, forge coalitions, and give a voice to the voiceless. Comparisons are drawn between the United States, European, Asian, and Latin American experiences. credits, SS; SI, IDS, Winter-C. Wong
322. Political Economy of Latin America* A research seminar that focuses on politics and economic development Latin America. Topics include: macroeconomic crisis and industrialization, poverty and inequality, regional integration, state reform and decentralization. Students work on individual research projects of their choosing. 6 credits, SS; SI, IS, QRE, Not offered in 2010-2011
323. Cuban Politics Seminar The seminar will examine the major political and economic transitions in Cuban history, beginning with the wars of independence and culminating in the post-Cold War period of the Communist era. Students will engage in original research projects related to the major themes in the course. 6 credits, SS; SI, IS, Winter-A. Montero
326. America's China Policy* This course examines the factors that shape United States policies toward China. Topics include the early relationships in the 1800s, the problems of the war years, and the strains of the People's Republic era. 6 credits, SS; SI, IS, Fall—R. Grow, B. Levin
328. Foreign Policy Analysis* Foreign policy analysis is a distinct sub-field within international relations that focuses on explaining the actions and choices of actors in world politics. After a review of the historical development of the sub-field, we will explore approaches to foreign policy that emphasize the empirical testing of hypotheses that explain how policies and choices are formulated and implemented. The psychological sources of foreign policy decisions (including leaders' beliefs and personalities and the effect of decision-making groups) are a central theme. Completion of a lower level IR course and the stats/methods sequence is recommended. 6 credits, SS; SI, QRE, Not offered in 20102011
329. Vietnam, Iraq, and American Policy* This course will examine and compare the factors which led to America's involvement in the Vietnam War of the 1960's and the Iraq War that began in 2003. Discussions will focus on the domestic and foreign policy issues that shaped American public perceptions, and investigate both government policies and military strategies. The class will also discuss the impact of both conflicts on the course of American foreign policy. 6 credits, SS; SI, IS, Not offered in 2010-2011
330. The Complexity of Politics* Theories of complexity and emergence relate to how large-scale collective properties and characteristics of a system can arise from the behavior and attributes of component parts. This course explores the relevance of these concepts, studied mainly in physics and
biology, for the social sciences. Students will explore agent-based modeling to discover emergent properties of social systems through computer simulations they create using NetLogo software. Reading and seminar discussion topics include conflict and cooperation, electoral competition, transmission of culture and social networks. Completion of the stats/methods sequence is highly recommended. 6 credits, SS; SI, QRE, Fall-G. Marfleet
332. Religion and Politics* In this class, we will investigate the relationship between politics and religion around the world. It is not a class on theology or belief systems. Instead, we will focus on describing and explaining how religious beliefs and organizations affect political outcomes and viceversa. Topics will include the relationship between religion and the state, the political dimensions of religious movements, the religious dimensions of political movements, and how religious perspectives on such issues as gender, sexuality, race, and war reinforce or clash with political values and policy. 6 credits, SS; SI, IS, Not offered in 2010-2011
333. Sustainability Science* This course is about the science of integrating social changes and environmental changes to understand and to be able to advance analytical concepts, research methods, and theories of society-nature interactions. Scholars in the field of sustainability science work to understand, explain, and predict both qualitative and quantitative changes that have occurred in society and nature. Students will learn fundamental theories and concepts that explain linkages between social change and environmental changes; gain methods and skills to measure social changes qualitatively and quantitatively; and gain critical thinking and writing skills by using climate change data and social change data. 6 credits, SS, WR; SI, WR2, IS, QRE, Not offered in 2010-2011
345. Guerillas, Warlords and Bandits: The Art of Asymmetric War* Guerilla insurgencies are a special kind of war and present special problems for foreign policy formation and military response. This course looks at historical cases and theoretical propositions that range from Sun Zi The Art of War to Mao Zedong, Vo Nguyen Giap, and Che Guevara. Case studies from China, Vietnam, Afghanistan, Iraq, early United States, and South America. Examination of strategies based on Chinese game of WeiQi (Go) as opposed to western Chess. 6 credits, SS; SI, IS, Not offered in 2010-2011
346. Spies, Rogues and Statesmen: Intelligence and the Formation of Foreign Policy* Collecting and interpreting information--real and not-so-real--ripples across the making of defense strategy and foreign policy. This seminar examines the link between intelligence gathering and policy formation. Case studies from WWII, the Cold War, the Vietnam era, and the Iraqi Wars. 6 credits, $S S$; $S I, I S$, Fall-R. Grow
347. America and Its Wars* War has a special place in American history and this course will look at the changing role of armed conflict in American foreign policy. The course will be based on a series of case studies and the class will look at "large wars" such as World War II and smaller "limited engagements" in Asia and Latin America. Students will examine the debates about strategies and tactics in each of these conflicts and then merge their insights from the case studies with arguments from the larger theoretical literature about war and its role in foreign policy. 6 credits, SS; SI, IS, Not offered in 2010-2011
349. Ideology and Power* Ideology is a rather new concept (end of the eighteenth century), but it already has an intense, turbulent, still unfolding history. We will discuss and analyze different theories of ideology from the nineteenth and twentieth century: How do social structures and interests shape ideas? How do ideas affect political practice and how do they help legitimize political power? Can politics overcome ideology and develop a more scientific outlook on society? What role do intellectual and political elites play in these processes? We will read authors such as K. Marx, M. Weber, K. Mannheim, J. Habermas, M. Foucault, and P. Ricoeur. 6 credits, SS; HI, Offered in alternate years, Winter-M. Czobor-Lupp
350. Nietzsche and Political Philosophy* Perhaps no thinker has influenced the thought of the current
age as much as Friedrich Nietzsche, whose critique of rationalism, modernity, and liberalism gave rise to what we now know as post-modernism. But Nietzsche was not only a critic. He also propounded a positive political teaching grounded in a comprehensive interpretation of human life. In this course we will engage in a close study of Beyond Good and Evil, Nietzsche's most overtly political book and perhaps his most beautiful one. Selections from some of his other books will also be assigned. 6 credits, SS; HI, Winter—L. Cooper
352. Political Theory of Alexis de Tocqueville* This course will be devoted to close study of Tocqueville's Democracy in America, which has plausibly been described as the best book ever written about democracy and the best book every written about America. Tocqueville uncovers the myriad ways in which equality, including especially the passion for equality, determines the character and the possibilities of modern humanity. Tocqueville thereby provides a political education that is also an education toward self-knowledge. 6 credits, SS, WR; HI, WR2, IS, Not offered in 2010-2011
355. Identity, Culture and Rights* This course will look at the contemporary debate in multiculturalism in the context of a variety of liberal philosophical traditions, including contractarians, libertarians, and Utilitarians. These views of the relationship of individual to community will be compared to those of the communitarian and egalitarian traditions. Research papers may use a number of feminist theory frameworks and methods. 6 credits, $S S, W R ; S I, W R 2, I S$, Offered in alternate years, Winter-B. Allen
358. Comparative Social Movements* This course will examine the role that social movements play in political life. The first part of the course will critically review the major theories that have been developed to explain how social movements form, operate and seek to influence politics at both the domestic and international levels. In the second part of the course, these theoretical approaches will be used to explore a number of case studies involving social movements that span several different issue areas and political regions. Potential case studies include the transnational environmental movement, religious movements in Latin America and the recent growth of far right activism in northern Europe. 6 credits, SS; SI, IS, Fall-D. Gupta
360. Political Economy Seminar* This seminar will use a number of contemporary theories to evaluate political economy phenomena. The class will include case studies, simulation exercises and field trips. 6 credits, SS; SI, IS, QRE, Spring-R. Grow
361. Approaches to Development* The meaning of "development" has been contested across multiple disciplines. The development and continual existence of past civilizations has been at the core of the discourse among those who study factors leading to the rise and fall of civilizations. Can we reconcile the meaning of development in economic terms with cultural, ecological, political, religious, social and spiritual terms? How can we measure it quantitatively? What and how do the UNDP Human Development Indexes and the World Development Reports measure? What are the exemplary cases that illustrate development? How do individual choices and patterns of livelihood activities link to development trends? 6 credits, $S S, W R$; SI, WR2, IS, QRE, Not offered in 2010-2011
362. Globalization and the State* We will examine how and to what extent the processes of globalization are changing notions and practices of state sovereignty. Given that scholars do not agree on the definition of either state sovereignty or globalization, this is no easy task. We will begin by examining the historic development of state since the seventeenth century and how notions of state sovereignty have changed, to better understand how economic integration, the communications revolution and the growing importance of global civil society (globalization) are (re)shaping states. We will explore how globalization influences state behavior in the international realm and within its own borders. 6 credits, SS; SI, IS, Not offered in 2010-2011
364. Capitalism and Its Critics* This research seminar examines the major debates in studies of contemporary capitalism in advanced capitalist and developing countries around the world. Moving
beyond the classic theoretical debates of liberal, Marxist, developmentalist, and post-industrial arguments, the seminar will focus on recent debates concerning changes in labor markets, class structures, production systems, political institutions and social distribution, corporate governance, the multilateral system (e.g., IMF, the World Bank), supranational entities such as the European Union, and critical approaches on economic development, including new studies of the informal labor market. 6 credits, SS; SI, IS, QRE, Fall-A. Montero
366. Urban Political Economy* Crosslisted with POSC.266. City revenue is increasingly dependent on tourism. Cities manufacture identity and entertainment, whether we think of Las Vegas or Jerusalem, Berlin or Bilbao, the ethnoscapes of Copenhagen or the red light district of Amsterdam. As cities compete in the global economy to become playgrounds for a transnational tourist class, what is the role of urban residents? Who governs? Who benefits? A research paper will be required. 6 credits, $S S ; S I, I S$, Spring-R. Keiser
367. Suburbanization in America* The process of suburbanization transformed the United States in a revolutionary way, yet this was a quiet revolution. Both the causes and consequences of suburbanization can be found in the country's politics, race relations, economy, literature and popular imagery, architecture and design, and our definition of community. This course will take an explicitly interdisciplinary approach to these topics. Prerequisite: Political Science 122 or American Studies 345. 6 credits, SS; SI, IDS, Not offered in 2010-2011
378. Beijing Program: Chinese Social and Political Institutions On-site examination and evaluation of important institutions (i.e., banks, hospitals, environment offices, middle schools, etc.) that shape the Chinese economic and political process. Students may take this course or optional 3-credit Chinese language course that is taught at three levels-depending on the student's proficiency. 3 credits, $S S$; $S I, I S$, Not offered in 2010-2011
379. Beijing Program: Chinese Decision Making This course would be based on simulation exercise---which is already part of the seminar--but restructured and expanded to place exercise in more exact theoretical frame. 3 credits, SS; SI, IS, Not offered in 2010-2011
381. Beijing Program: Politics of Economic Development This is a cross-disciplinary program in which students from different academic departments analyze the economy of China, investigate the government institutions that develop and shape Chinese policy, and meet the people who make policy work. The seminar will combine classroom study with visits to economic agencies, government organizations, and industrial and commercial sites. 6 credits, SS, RAD; SI, IS, Not offered in 2010-2011
382. Beijing Program: Chinese Economics in Transition This course introduces the student to China's historical, political, and economic development in the twentieth century. The primary framework applied is an analysis of the strategies and outcomes of economic development within the context of a particular socialist economic and political system. While focusing mainly on political-economic philosophies within real economic constraints. Prerequisites: Economics 110 and 111. 6 credits, SS; SI, IS, Not offered in 2010-2011
383. European Political Economy Seminar in Madrid and Maastricht: Politics of the European Union This course examines the formation, development, institutions, laws, and policies of the European Union, with special emphasis on current issues arising from the Maastricht and Amsterdam Treaty revisions in the 1990s. Students will be divided into smaller groups to focus on different policy areas during the last two weeks of the course. 6 credits, SS; SI, IS, Spring-A. Montero
388. European Political Economy Seminar in Madrid and Maastricht:Spanish Politics and Political Economy This seminar will examine the institutions, actors, and movements that made Spanish democracy possible and that govern this country today. Students will explore class, gender, ethnic, and nationalist cleavages in Spanish society and learn how they have shaped institutions at the
national and subnational levels. Instruction will include travel to sites outside the Madrid region. Instruction in this course will also complement the research assignment of the Spanish portion of POSC 392. 6 credits, SS; SI, IS, Spring-A. Montero

## 392. European Political Economy Seminar in Madrid and Maastricht: Comparative Field

Research Methods Students will be divided into teams to conduct two sustained research projects. The first will take place in Spain during the first half of the program and will involve systematic interviewing of Spanish political party and government elites in several regions of Spain. The second-half assignment will focus on an elite survey in Brussels as part of Political Science 383. As part of the regular instruction for these projects, students will be coached on how to prepare contacts, work with official sources, research and use of primary documents, conduct on-site interviews and visits, find solutions to the language barrier problem, and deal with other aspects of fieldwork research in comparative politics. 6 credits, $S / C R / N C, N D ; N E$, Spring-A. Montero
400. Integrative Exercise 6 credits, $S / N C, N D ; N E$, Fall, Winter, Spring—Staff

## PSYCHOLOGY (PSYC)

Chair: Professor Seth N. Greenberg<br>Professors: Sharon A. Akimoto, Neil S. Lutsky, Julie J. Neiworth<br>Benedict Distinguished Visiting Professor: Seth N. Greenberg<br>Associate Professor: Mija M. Van Der Wege, Lawrence J. Wichlinski,<br>Assistant Professor: Kenneth B. Abrams<br>Visiting Assistant Professors: Sara Gorchoff, Susan Ellis Marino<br>Senior Lecturer: Steven F. Kozberg

Psychology at Carleton provides a systematic approach to the study of behavior and experience. It examines processes of physiological functioning, human and animal learning, human and animal cognition, cognitive and social development, personality, social influence, and psychopathology, and treats particular topics (e.g., prejudice, real-life decision making, and psychopharmocology) that are representative of the diversity and complexity of psychology. It also strongly emphasizes the development of analytic and expressive skills that are the basis of investigation, evaluation, and communication in the field.

Psychology 110 is the basic introductory course in the department and is a prerequisite for all other courses in psychology. Only in exceptional circumstances (e.g., an advanced placement score of 4 or 5 or a higher level IB score of 6 or 7) will a student be allowed to enroll in an upper-level psychology course without having taken Psychology 110. Majors in the department generally enroll in mid-level courses in our three core areas:

Biological and Behavioral Processes Courses: 210, 212, 216, 220, 263
Cognitive Studies Courses: CGSC/PSYC 232, PSYC 234, CGSC 236
Social Behavior, Development, and Personality Courses: 224, 250, 252, 254, 256, 258, 260
Majors are advised to plan their schedules carefully in light of the prerequisites listed for upperlevel courses in each area and the schedule of course offerings. A major in psychology prepares students for graduate study toward an advanced research degree in psychology and for a variety of professional programs and careers in psychological and social service areas. It also serves those intending to pursue careers in law, medicine, education, and business.

## Requirements for a Major

The introductory course (110), (unless waived by an advanced placement score of 4 or 5 or a higher level exam IB score of 6 or 7, and a passable grade in a mid-level course); the measurement and
methods and accompanying lab (200, 201); four courses from a list of core courses (courses numbered 210-263) including one from the Biological and Behavioral Processes group (210, 212, 216, 220, 263), one from the Cognitive Studies group (CGSC/PSYC 232, PSYC 234, CGSC 236), and one from the Social Behavior, Development and Personality group (224, 250, 252, 254, 256, 258, 260); two upperlevel courses ( $310,318,384$, CGSC $380,385,386$ ) including at least one seminar (courses numbered 358 to 386 ); two laboratory courses ( $211,217,221,233,235,257,259,261$ ); a capstone seminar of 299 plus either $397,398,399$; and the integrative exercise (400).

It is strongly recommended that all majors complete the measurement and methods (200 and 201) course with lab during their sophomore or junior years. Particular courses in biology, education, linguistics, mathematics and computer science, economics, philosophy, and sociology-anthropology may also be recommended, depending on an individual's interests and plans.

For future planning purposes, majors should anticipate that the capstone seminar would be taken in the spring of the junior year (299) plus either 397, 398 or 399 , and that the integrative exercise will be completed during the fall and possibly winter of the senior year depending on the nature of the comps project.

## Psychology Courses

100. The Psychology of Numbers: A Fair \& Balanced Look at Statistical Reporting This course will focus on topics such as the cognitive processes underlying how people interpret numbers and visual representations of numbers, the persuasive effects of using different numbers or visual representations, and how journalists and politicians use and report research statistics. Students will attain a grasp of basic statistics, an understanding of the scientific method and survey research methods, and an introduction to relevant aspects of cognitive and social psychology. In addition, students will hone their skills both at interpreting and critiquing numerical reporting and integrating numbers and scientific evidence in their writing. 6 credits, AI, WR1, QRE, Fall-M. Van Der Wege
101. Principles of Psychology This course surveys major topics in psychology. We consider the approaches different psychologists take to describe and explain behavior. We will consider a broad range of topics, including how animals learn and remember contexts and behaviors, how personality develops and influences functioning, how the nervous system is structured and how it supports mental events, how knowledge of the nervous system may inform an understanding of conditions such as schizophrenia, how people acquire, remember and process information, how psychopathology is diagnosed, explained, and treated, how infants and children develop, and how people behave in groups and think about their social environment. 6 credits, SS; SI, Fall, Winter, Spring-Staff
102. Measurement and Data Analysis in Psychology The course considers the role of measurement and data analysis focused on behavioral sciences. Various forms of measurement and standards for the evaluation of measures are explored. Students learn how to summarize, organize, and evaluate data using a variety of techniques that are applicable to research in psychology and other disciplines. Among the analyses discussed and applied are tests of means, various forms of analysis of variance, correlation and regression, planned and post-hoc comparisons, as well as various non-parametric tests. Research design is also explored. Prerequisite: Psychology 110. Psychology 200 requires concurrent registration in Psychology 201. 6 credits, MS; FSR, QRE, Winter, Spring-J. Neiworth, M. Van Der Wege
103. Measurement and Data Analysis Lab This lab course accompanies the lecture course, Psychology 200, and must be taken during the same term. The lab will provide an opportunity to explore lecture topics more deeply, and in particular emphasize data collection and computational skills. 2 credits, ND; FSR, QRE, Winter, Spring-J. Neiworth, M. Van Der Wege
104. Psychology of Learning A summary of theoretical approaches, historical influences and contemporary research in the area of human and animal learning. The course provides a background in
classical, operant, and contemporary conditioning models, and these are applied to issues such as behavioral therapy, drug addiction, decision-making, education, and choice. It is recommended that students enroll concurrently in Psychology 211. A grade of C- or better must be earned in both Psychology 210 and 211 to satisfy the LS requirement. Prerequisite: Psychology 110, or consent of the instructor. 6 credits, SS, WR; LS, WR2, QRE, Not offered in 2010-2011
105. Laboratory Research Methods in Learning This course accompanies Psychology 210. Students will replicate classical studies and plan and conduct original empirical research projects in the study of human and animal learning. Psychology 211 requires concurrent or prior registration in Psychology 210. A grade of C- or better must be earned in both Psychology 210 and 211 to satisfy the LS requirement. Prerequisite: Psychology 110. 2 credits, ND, WR; LS, WR2, QRE, Not offered in 2010-2011
106. Comparative Cognition This course is a systematic investigation of nonhuman animals' mental experiences. Various cognitive capabilities are reviewed, including counting, communication, categorization, self concept, and deception, memory mechanisms such as rehearsal and imagery, and social concepts in animals. Under review are these capabilities in different species of birds and mammals, including rats, pigeons, parrots, various species of monkeys, apes, and dolphins. Prerequisite: Psychology 110 or Biology 126 or Psychology 216 or permission of the instructor. 6 credits, SS, WR; SI, WR2, Not offered in 2010-2011
107. Behavioral Neuroscience An introduction to the physiological bases of complex behaviors in mammals, with an emphasis on neural and hormonal mechanisms. A grade of C - or better must be earned in both Psychology 216 and 217 to satisfy the LS requirement. 6 credits, MS; LS, Winter-L. Wichlinski
108. Laboratory Research Methods in Behavioral Neuroscience This course accompanies

Psychology 216. The course provides instruction and experience in methods of behavioral neuroscience, the study of the inter-relation of the brain (and hormonal systems) and behavior. The focus of this laboratory will be on standard methods of inducing behavioral changes via neural and hormonal manipulations in mammals. This course may be taken separately from Psychology 216. A grade of C- or better must be earned in both Psychology 216 and 217 to satisfy the LS requirement. 2 credits, ND; NE, Winter-L. Wichlinski
220. Sensation and Perception We will address the question of how humans acquire information from the world to support action, learning, belief, choice, and the host of additional mental states that comprise the subject matter of psychology. In other words "How do we get the outside inside?" We will initially consider peripheral anatomical structures (e.g. the eye) and proceed through intermediate levels of sensory coding and transmission to cover the brain regions associated with each of the major senses. Readings will include primary sources and a text. In addition to exams and papers, students will conduct an investigation into an area of personal interest. A grade of C - or better must be earned in both Psychology 220 and 221 to satisfy the LS requirement. Prerequisite: Psychology 110 or consent of instructor. 6 credits, SS; LS, Not offered in 2010-2011
221. Laboratory Research Methods in Sensation and Perception This course accompanies Psychology 220. Students will replicate classical phenomena and plan and conduct original empirical research projects in the study of human perceptual processes. Psychology 221 requires concurrent or prior registration in Psychology 220. A grade of C- or better must be earned in both Psychology 220 and 221 to satisfy the LS requirement. 2 credits, ND; LS, Not offered in 2010-2011
224. Psychology of Gender This course will engage the student in various readings and exercises on theory and research in the psychology of gender. The student will come to clearly understand (1) several broad theories of gender, (2) how gender impacts our thoughts and behavior, (3) a sampling of empirical research of gender, (4) how to critically evaluate gender research, especially "popular" research, (5) the controversies surrounding traditional descriptions of gender, (6) how gender is involved in family,
sexuality, work, friendships/relationships, mental health, and cross-cultural concerns. Prerequisite: Psychology 110. 6 credits, SS; SI, Spring-S. Gorchoff
232. Cognitive Processes Crosslisted with CGSC.232. An introduction to the study of mental activity. Topics include attention, pattern recognition and perception, memory, concept formation, categorization, and cognitive development. Some attention to gender and individual differences in cognition, as well as cultural settings for cognitive activities. Prerequisite: Psychology 110 or permission of the instructor. Corequisite: Psychology 233. A grade of C- or better must be earned in both Psychology 232 and 233 to satisfy the LS requirement. 6 credits, SS, WR; LS, WR2, Spring-K. Galotti
233. Laboratory Research Methods in Cognitive Processes Crosslisted with CGSC.233. Students will participate in the replication and planning of empirical studies, collecting and analyzing data relevant to major cognitive phenomena. Prerequisite: Psychology 110 or permission of the instructor. Corequisite: Psychology 232. A grade of C- or better must be earned in both Psychology 232 and 233 to satisfy the LS requirement. 2 credits, ND; LS, Winter-K. Galotti
234. Psychology of Language This course will cover a range of aspects of language use. We will spend time discussing language production and comprehension, discourse processing, the relationship between language and thought, and language acquisition. Additionally, we will touch on issues of memory, perception, concepts, mental representation, and neuroscience. Throughout the course, we will emphasize both the individual and social aspects of language as well as the dynamic and fluid nature of language use. Requires concurrent registration in Psychology 235. A grade of C- or better must be earned in both Psychology 234 and 235 to satisfy the LS requirement. Prerequisite: Psychology 110. 6 credits, SS; LS, Winter-M. Van Der Wege
235. Psychology of Language Laboratory This laboratory experience will expose students to a variety of methodologies employed by researchers interested in studying language. Throughout the term, students will both participate in experiments and conduct experiments. We will spend time discussing and performing typical analyses. Finally, students will be expected to become proficient in writing their experimental work in APA format and in presenting their research ideas in an oral format. Psychology 235 requires concurrent registration in Psychology 234. A grade of C- or better must be earned in both Psychology 234 and 235 to satisfy the LS requirement. Prerequisite: Psychology 110. 2 credits, ND; LS, Winter-M. Van Der Wege
248. Cross-Cultural Psychology Do psychological principles apply universally or are they culture specific? How does the exploration of psychological phenomenon across cultures inform our understanding of human behavior? This course examines major theoretical and empirical work in the field of Cross-Cultural Psychology. The course is structured in two segments. The first half provides background in major aspects of the field. The second half focuses on the creation of an applied product: a web site containing 1) critical analysis of a particular cross cultural psychological phenomenon, 2) visual depiction of the phenomenon in action, and 3) evidence-based proposal for improving cross cultural interaction. Prerequisite: Psychology 110. 6 credits, SS, RAD; SI, IS, Fall—S. Akimoto
250. Developmental Psychology An introduction to the concept of development, examining both theoretical models and empirical evidence. Prenatal through late childhood is covered with some discussion of adolescence when time permits. Topics include the development of personality and identity, social behavior and knowledge, and cognition. In addition, attention is paid to current applications of theory to such topics as: day care, the role of the media, and parenting. Prerequisite: Psychology 110 or prior consent of the instructor. 6 credits, SS; SI, Winter-K. Galotti
252. Personality An examination of analytic models that attempt to characterize and explain aspects of behavior, thought, and emotion that are central to our conceptions of ourselves as distinctly human beings and as individuals. Original theoretical statements and relevant empirical literature will be consulted. Prerequisite: Psychology 110 or consent of the instructor. 6 credits, SS; SI, Spring-N.

## Lutsky

253. Research Methods in Personality Laboratory A laboratory to be taken concurrently with the Personality course, to undertake research on topics in personality. 2 credits, ND; SI, Not offered in 20102011
254. Psychopathology An introduction to theories, research, treatments, and issues in the field of psychopathology. This course will be run as a seminar. Prerequisites: Psychology 110 or consent of the instructor. Recommended: Psychology 252. 6 credits, SS; SI, Winter—S. Kozberg
255. Social Behavior and Interpersonal Processes The social psychological analysis of human social behavior, interpersonal processes, and group influences. Concurrent registration in Psychology 257 is strongly recommended. A grade of C- or better must be earned in both Psychology 256 and 257 to satisfy the LS requirement. 6 credits, SS; LS, Winter-S. Akimoto
256. Laboratory Research Methods in Social Behavior and Interpersonal Processes Students will participate in the planning and replication of empirical studies of the social psychology of social behavior. Psychology 257 requires concurrent registration in Psychology 256. A grade of C- or better must be earned in both Psychology 256 and 257 to satisfy the LS requirement. 2 credits, ND; LS, Winter-S. Akimoto
257. Social Cognition This course will focus on a social psychological analysis of social cognition, perception and judgment. It includes the examination of attitudes, stereotyping, attribution and the self. Concurrent registration in Psychology 259 is strongly suggested. Prerequisite: Psychology 110 or permission of the instructor. 6 credits, SS; SI, Fall-S. Gorchoff
258. Laboratory Research Methods in Social Cognition Students will participate in the design and replication of social psychological studies related to social cognition. This course requires concurrent registration in Psychology 258. 2 credits, ND; SI, Fall-S. Gorchoff
259. Health Psychology This course will examine how psychological principles can be employed to promote and maintain health, prevent and treat illness, and encourage adherence to disease treatment regimens. Within a biopsychosocial framework, we will analyze behavioral patterns and public policies that influence risk for cardiovascular disease, cancer, chronic pain, substance abuse, and sexually transmitted diseases, among other conditions. Additionally, students in groups will critically examine the effects of local policies on health outcomes and propose policy changes supported by theory and research. A grade of C- or better must be earned in both Psychology 260 and 261 to satisfy the LS requirement. Prerequisite: Psychology 110. 6 credits, SS; LS, Not offered in 2010-2011
260. Health Psychology Lab This course provides students with direct experience applying principles of health psychology. Students will engage in a term-long self-directed project aimed at increasing the frequency of a healthy behavior (such as exercising) or decreasing the frequency of an unhealthy behavior (such as smoking). Additionally, we will read and discuss case studies that relate to the current topic in the lecture portion of the course. Concurrent registration in Psychology 260 is required. A grade of C- or better must be earned in both Psychology 260 and 261 to satisfy the LS requirement. 2 credits, ND; LS, QRE, Not offered in 2010-2011
261. Sleep and Dreaming This course will examine recent experimental findings and current perspectives on sleep, dreaming, sleep disorders, and states of consciousness. Prerequisite: Psychology 110.6 credits, SS; SI, Spring-L. Wichlinski
262. Cross Cultural Seminar in Prague: Directed Reading 2 credits, $S / C R / N C$, ND; NE, Fall-K. Abrams
263. Capstone Seminar: General This capstone seminar focuses on issues of interest to all students planning to choose a comprehensive project. The course is a lead in to the more specialized core
seminars of 397,398 , and 399 . The goal of the course is to provide a broad review of subject matter and options that would aid students in their selection of a specific topic. Students will then be assigned to 397, 398, or 399 depending upon discussions and expressed interest. Prerequisite: Psychology Major. 3 credits, $S / C R / N C, N D ; N E$, Spring-Staff
264. Psychopharmacology This course will cover the major categories of drugs that possess psychoactive properties, with an emphasis on their effects on the nervous system. In addition, drug use and abuse in a larger societal context will be examined. Prerequisite: Psychology 216 or consent of the instructor. 6 credits, ND; SI, Fall-L. Wichlinski
265. Counseling Psychology An introduction to theories, research, techniques, and issues in the field of counseling psychology. This course will be run as a seminar. Prerequisites: Psychology 110 or consent of the instructor. Recommended: Psychology 252. 6 credits, SS; SI, Not offered in 2010-2011
266. Cross-Cultural Psychology Seminar in Prague: Cross-Cultural Psychopathology In this course we will critically examine the extent to which the etiology and manifestation of mental disorders are affected by culture and politics. The proposition that mental disorders prevalent within a culture shed light on the value structure and preoccupations of that culture will be considered. Prerequisite: Psychology 110. 6 credits, SS, RAD; SI, IS, Fall—K. Abrams
267. Psychology of Reading Words The seminar explores the thought processes that contribute to our ability to turn written marks on a page into a message. We look at the sub-skills necessary to identify a word in text and what happens when such skills are missing. In addition, we consider how words are integrated into meaningful thought. The first portion of the course reviews the literature in this important area while the last portion requires student reports on related and applied issues. Thus, we also consider braille reading, reading by deaf, dyslexia, bilingualism, etc. Prerequisite: Psychology 110 and a course in cognition or permission of the instructor. 6 credits, SS; NE, Not offered in 2010-2011
268. Science and Pseudoscience in Psychology In this seminar we will explore the differences between scientific and pseudoscientific approaches to the study of human behavior. Common characteristics of pseudoscientific approaches as well as tools for critically evaluating claims to knowledge will be identified. Topics covered will include controversial assessment techniques (astrology, hypnosis), treatments for psychological conditions (homeopathy, facilitated communication), treatments for medical conditions (psychic surgery, faith healing), and paranormal phenomena (extrasensory perception, UFO abductions). Students will be encouraged to maintain a healthy degree of skepticism toward controversial claims and utilize a high standard of evidence before accepting them. Prerequisites: Psychology 110 or consent of the instructor. 6 credits, SS; SI, Not offered in 2010-2011
269. Cognitive Neuroscience It should be obvious that every process that goes on in the mind has physiological underpinnings. But, whether we can unlock the secrets of learning, memory and perception as they are supported by neurons and neural connections is a longstanding and elusive problem in psychology. Contemporary articles are the text for this discussion-driven course. The student should leave the class with a working understanding of brain processes and of contemporary theories of brain processes that may support perception, memory, language, and consciousness. Prerequisite: Psychology 110 or Biology 125 or Psychology 216 or permission of the instructor. 6 credits, SS; SI, QRE, Fall-J. Neiworth
270. Clinical Psychobiology This seminar will focus on the biological basis of human mental disorders including schizophrenia, mood disorders, anxiety disorders, and substance abuse. 6 credits, SS; SI, Not offered in 2010-2011
271. Behavioral Medicine This seminar will examine mind-body interactions and health-related aspects of psychology. Topics covered include psychosomatic illness, personality variables in health and disease, and nervous system-immune system interactions. 6 credits, $S S$; NE, Not offered in 2010-2011
272. Evolutionary and Developmental Trends in Cognition Recent findings have brought to light some very compelling examples of humanlike cognition in nonhuman primates: tool use and tool making, family bonding, complex social behaviors such as cooperation, altruism, communication, and emotion. The study of infant cognition has also revealed more complex cognitive abilities in developing humans. Each of these topics is considered in the context of the cognitive workings of the primate mind, with emphases on apes (gorilla, chimpanzee), monkeys (particularly cebus and rhesus varieties) and human children. The goal is to evaluate the uniqueness of primate cognition, both human and nonhuman. Prerequisites: Psychology 110 or Biology 126 or Psychology 216 or permission of the instructor. 6 credits, SS; SI, QRE, Not offered in 2010-2011
273. Face Recognition This seminar begins with an overview of some of the explanations offered on how we recognize faces. We then delve into specific issues such as cross race identification, eyewitness identification, own face perception, perception of emotion on a face, and perception of faces by children. Primary sources material will come from primarily cognitive and social cognitive journals. Prerequisite: Psychology 232, or Psychology 220 recommended or permission of instructor. 6 credits, $N D$; $N E$, Winter-S. Greenberg
274. Eyewitness Testimony in Children: Reconstructive Memory The course covers in a broad sense how cognitive research informs us about the accuracy of eyewitnesses. Issues raised include memory for traumatic and isolated events, false memory, reconstructive memory, role of attention and perception and face recognition. We also discuss remedies for innaccurate reporting. Special attention is paid to child performance in a witness role. The course begins with general discussion of these issues, and then continues with lectures from noted experts in the field. Students will have a chance to read original research and discuss their conclusions with experts. Prerequisites: Either Cognitive Science/Psychology 232 or 256 or 258.6 credits, SS; SI, Not offered in 2010-2011
275. Language and Deception In this course we will examine deception and persuasion in language use. We will take up three main issues. The first is what it means to deceive and how people deceive others through language. What methods do they use, and how do these methods work? The second issue is why people deceive. What purposes do their deceptions serve in court, in advertising, in bureaucracies, in business transactions, and in everyday face-to-face conversation? The third issue is the ethics of deception. Is it legitimate to deceive others, and if so, when and why? Prerequisites: Psychology/Cognitive Science 232, 234, or 236. 6 credits, SS; SI, QRE, Not offered in 2010-2011
276. Neural Plasticity This seminar will examine how the brain changes in response to experience, with a focus on the mammalian brain. Examples will be drawn from the literature on "normal" development as well as from recent clinical research, both basic and applied. Prerequisite: Psychology 216. 6 credits, SS; NE, Not offered in 2010-2011
277. Research Seminar in Language: Conversational Processes Any conversation is a series of coordinated actions on the part of two or more people. This seminar will review current research on the cognitive and social processes involved in this coordination. Students will take an active role in conducting research based on the readings and class discussions. Prerequisites: Psychology 200/201 and CGSC/PSYC 232 or Psychology 234. 6 credits, SS; NE, Not offered in 2010-2011
278. Child and Adolescent Psychiatry This seminar will focus on the biological and psychological components of psychiatric disorders in children and adolescents. We will also address the possible causes of these disorders, and examine some current controversies surrounding diagnosis and treatment. Prerequisite: Psychology 110. 6 credits, SS; NE, Spring-S. Kozberg, L. Wichlinski
279. Topics in Social and Personality: Close Relationships This seminar will examine the contemporary effort to use the tools of rigorous science to help us understand the sources and nature of interpersonal relationship of significance. Prerequisite: Psychology 252, 256, 258, or permissions of the instructor. 6 credits, SS; SI, Winter-S. Gorchoff
280. Topics in Social and Personality: Positive Psychology This seminar will examine the contemporary effort to use the tools of rigorous science to help us understand the sources and nature of positive human strengths, characteristics, resources, aspirations and institutions. Prerequisite: Psychology 252, 256, 258, or permissions of the instructor. 6 credits, SS; SI, Fall—N. Lutsky
281. Psychology of Prejudice This seminar introduces students to major psychological theories and research on the development, perpetuation and reduction of prejudice. A sociological and historical approach to race, culture, ethnicity and race relations will provide a backdrop for examining psychological theory and research on prejudice formation and reduction. Major areas to be discussed are cognitive social learning, group conflict and contact hypothesis. Prerequisites: Psychology 110 or permission of instructor. Psychology 256 or 258 recommended. 6 credits, SS, RAD; SI, IDS, Spring-S. Akimoto
282. Biologial and Behavioral Psychology This capstone seminar focuses on issues of interest to students planning to choose a comprehensive project in the areas of biological and behavioral psychology. The goals of the course are to review skills pertinent to scholarly investigation of topics within biological and behavioral psychology, introduce a variety of topics that are of current interest in the respective fields, mentor students in scientific proposal development and guide students in preparing the construction of comps projects. Prerequisite: Several 200-level courses in Psychology. 3 credits, ND; NE, Spring-J. Neiworth
283. Cognitive and Developmental Psychology This capstone seminar focuses on issues of interest to students planning to choose a comprehensive project in the areas of cognitive and developmental psychology. The goals of the course are to review skills pertinent to scholarly investigation of topics within cognitive and developmental psychology, introduce a variety of topics that are of current interest in the respective fields, mentor students in scientific proposal development and guide students in preparing the construction of comps projects. Prerequisite: Several 200-level courses in Psychology. 3 credits, ND; NE, Spring—S. Greenberg, M. Van Der Wege
284. Social, Personality, Clinical and Health Psychology This capstone seminar focuses on issues of interest to students planning to choose a comprehensive project in the areas of social, personality, clinical and health. The goals of the course are to review skills pertinent to scholarly investigation of topics within social, personality, clinical and health psychology, introduce a variety of topics that are of current interest in the respective fields, mentor students in scientific proposal development and guide students in preparing the construction of comps projects. Prerequisite: Several 200-level courses in Psychology. 3 credits, ND; NE, Spring—N. Lutsky, S. Akimoto
285. integrative exercise Prerequisite: Psychology 397, 398, or 399.6 credits, S/NC, ND; NE, FallStaff

Other Courses Pertinent to Psychology
CGSC 236: Thinking, Reasoning, and Decision-Making
CGSC 380: Preschool Cognitive Development
CGSC 385: Cognitive Development in Middle Childhood
CGSC 386: Adolescent Cognition

## RELIGION (RELG)

Chair: Associate Professor Michael McNally
Professors: Roger R. Jackson, Michael McNally, Louis E. Newman
Associate Professor: Lori K. Pearson
Assistant Professor: Kristin C. Bloomer, Noah Salomon, Asuka Sango

Visiting Assistant Professor: Avaren E. Ipsen
Visiting Instructor: Shana Sippy
Post-doctoral Fellow: Anthony Terrance Wiley
The study of religion, in the context of a liberal arts education, draws upon multiple disciplines in the humanities and the social sciences. This is reflected in the variety of courses offered within the department: some introduce a religious tradition and trace its development historically; others examine in a cross-cultural context the issues faced by various religious communities and individuals; and still others explore and compare diverse theories and methods employed in the study of religions. The department is concerned with traditional and contemporary forms of both major and more marginal religions, and with both "elite" and "popular" forms of religious expression. We examine the existential, intellectual, and social problems to which religions respond, and probe the dynamic and often ambiguous relationship between religious beliefs and practices and the social order in which they are embedded. Throughout the curriculum, religion is approached as a significant and pervasive expression of human culture, both in the past and the present.

## Requirements for a Major

Sixty-nine credits in the department, including Religion 110; a minimum of one course numbered 111-199; two courses numbered 211-299; two advanced seminars (311-398); Religion 300: Issues in the Study of Religion; Religion 399: Senior Research Seminar; and Religion 400: Integrative Exercise. Students planning to major in Religion should consult with their adviser in the spring of their sophomore year; a sequence of at least three courses in a religious tradition, theme, or topic is to be designed in consultation with an academic adviser by the end of the junior year, and majors are expected to build some cross-cultural diversity into their programs of study. Religion 300 is normally taken during the winter term of the junior year, Religion 399 during the winter term of the senior year and Religion 400 in the spring term of the senior year. Religion 110 is a prerequisite for Religion 300.

## Religion Courses

100. Re-imagining God In this class we explore how religious thinkers have interrogated and reimagined the concept "God" in response to a range of modern intellectual, political, and cultural challenges to traditional faith. Focusing particularly on contemporary (post-WWII) contexts, we consider the ways in which questions related to secularization, social justice, oppression, and religious pluralism have prompted theologians to re-define the very meaning of the word "God" and the nature of God's power, agency, and relation to human communities. As we encounter these conceptions of God, we examine and assess the definitions of power, truth, and human fulfillment that undergird them. 6 credits, AI, WR1, Fall—L. Pearson
101. Buddhism and the Beats This course uses writings from the "Beat Generation" as a lens for understanding the place of Buddhism in American culture and society. Through the fiction, poetry, essays, and letters of such figures as Kerouac, Ginsberg, Snyder, Whalen, and di Prima, we will explore how the Beats appropriated Buddhist ideas and practices as part of a program to transform American literature and politics. We also will consider the Beats' predecessors and successors. Throughout, our central concern will be to understand what the Beats' embrace of Buddhism tells us about the nature of Buddhism, American culture, and their unexpected but fruitful intersection. 6 credits, AI, WR1, IDS, Fall-R. Jackson
102. Introduction to Religion This course offers an opportunity to reflect upon religion in human life. Sections vary with professors' aims, but all sections encounter material from more than one religious tradition, and probe theories of religion from several disciplinary perspectives. The study of individual
quests highlights the personal dimension of religion, while the examination of historical cases brings out its cultural and political dimensions. Issues of gender, power, and social location also receive attention. Although Religion 110 makes no attempt to survey the world's religions, it provides an introduction to aspects of religious life and to the academic field of religious studies. 6 credits, HU; HI, Fall, Winter, Spring—K. Bloomer, N. Salomon, S. Sippy
103. Judaism, Christianity, Islam Western civilization has been shaped decisively by three monotheistic religious traditions---Judaism, Christianity and Islam. In this course, we explore some of the central beliefs, values, and ritual practices of these religions, some of their interactions, and some of the issues that divide them. Attention will be paid both to the historical development of these traditions and to the distinctive forms they have assumed in modern times. The course will be useful for anyone interested in the religious roots of western culture and it will prepare you to do more advanced work in any of these traditions. No prerequisites. 6 credits, HU; HI, Not offered in 2010-2011
104. Religion and the Ethical This introductory course will examine philosophical accounts of what it means to live well, focusing mainly on works written since the American Civil War that are relevant to issues in religious ethics: whether morality requires a religious foundation, the ethical significance of divine commandments, and the concepts of virtue, goodness, evil, horror, holiness, sainthood, faith, and the sacred. Among the thinkers to be discussed are Tolstoy, H. Richard Niebuhr, Richard Rorty, John Finnis, Alasdair MacIntyre, Iris Murdoch, and Robert Merrihew Adams. 6 credits, HU; HI, Offered in alternate years, Spring-A. Wiley
105. Introduction to Judaism How does a religious tradition evolve over time? This course provides an overview of the Judaic tradition as a whole, exploring its history, modes of expression, and characteristic polarities as they have emerged in various times and places. The contours of classical Jewish life and thought are explored, as well as the crises, challenges, and choices confronting Jews and Judaism today. 6 credits, HU; HI, Not offered in 2010-2011
106. Introduction to Christianity This course will trace the history of Christianity from its origins in the villages of Palestine, to its emergence as the official religion of the Roman Empire, and through its evolution and expansion as the world's largest religion. The course will focus on events, persons, and ideas that have had the greatest impact on the history of Christianity, and examine how this tradition has evolved in different ways in response to different needs, cultures, and tensions--political and otherwise-around the world. This is an introductory course. No familiarity with the Bible, Christianity, or the academic study of religion is presupposed. 6 credits, $H U ; H I$, Offered in alternate years, Spring-K.

## Bloomer

122. Introduction to Islam This course introduces Islam, a 1400-year old religion whose more than one billion adherents are spread throughout the world today. Of the various ways of approaching such an extensive tradition, we will follow a socio-cultural method with particular emphasis on how various types of Muslims have understood and interpreted their religion over the course of history. We will examine Islamic religious ideals, practices, institutions, and personalities to elicit the broad parameters that give coherence to Islamic religion and civilization. The course will also emphasize the diversity of Islamic religious perspectives, paying attention to social factors such as language affiliation, ethnicity, nationality, and gender. 6 credits, $H U, R A D ; H I, I S$, Offered in alternate years, Winter-N. Salomon
123. Muhammad and the Qur'an This course explores the Islamic religious tradition through its scripture, the Qur'an, and the life of its prophet, Muhammad. We will study Muhammad's biography to understand how it has influenced the development of Islamic belief and ritual. Through an examination of religious texts, art, and music, we will explore the role his memory has played in popular religious culture. We will study the Qur'an through its content, its origins, and the impact it has had on the development of Islam. In the process, we will emphasize the Qur'an as an aesthetically charged scripture as well as a written text. 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
124. Jews and the American Experience What happens to a traditional religion when it is transplanted into a modern environment? How do people adapt old beliefs and practices to a new social setting, and what new forms of religious and ethnic life develop? These are the questions raised by the study of Jews and Judaism in America. We will analyze the development of Judaism in America through the works of historians, sociologists, novelists, filmmakers, and theologians. 6 credits, HU; HI, Not offered in 20102011
125. Jesus and the Gospels The Gospel accounts of Mark, Matthew, Luke and John are among the earliest Christian texts depicting the life, mission or "good news" of Jesus Christ. Comparative critical reading of these four Gospels is the basis for both historical and literary modes of discerning the social world of Jesus, his audiences, and his core message. Through these unique canonical texts that describe Jesus, his social world, and the audiences he inspired, this course will survey key results of the methods of distinguishing the worlds behind, in front of, and within these four Gospels, as well as the means of discerning them. 6 credits, HU; HI, Offered in alternate years, Winter-A. Ipsen
126. Native American Religions This course explores the history and contemporary practice of Native American religious traditions, especially as they have developed amid colonization and resistance. While surveying a broad variety of ways that Native American traditions imagine land, community, and the sacred, the course focuses on the local traditions of the Ojibwe and Lakota communities. Materials include traditional beliefs and practices, the history of missions, intertribal new religious movements, and contemporary issues of treaty rights, religious freedom, and the revitalization of language and culture. 6 credits, HU, WR, RAD; HI, WR2, IDS, Fall—M. McNally
127. Religion and American Culture This course explores the colorful, contested history of religion in American culture. While surveying the main contours of religion in the United States from the colonial era to the present, the course concentrates on a series of historical moments that reveal tensions between a quest for a (Protestant) American consensus and an abiding religious and cultural pluralism. 6 credits, HU, WR, RAD; HI, WR2, IDS, Not offered in 2010-2011
128. Religions of South Asia A survey of the origins and classical development of the major religious traditions of the Indian subcontinent. Primary attention will be given to the Hindu and Buddhist communities, but Islam and the Jain and Sikh traditions also are considered. Readings are drawn mainly from Indian sources in English translation. 6 credits, HU, RAD; HI, IS, Spring-S. Sippy
129. Religions in Chinese Culture An introduction to the major religious traditions of China, from earliest times to the present. Combining thematic and historical approaches, this course will scrutinize both defining charactersistics of, and interactions among, various religious traditions, including Buddhism, Daoism, and the Confuciansim, as well as Christianity and new religious movements. We also will discuss issues crucial in the study of religion, such as the relation between religion and violence, gender, modernity, nationalism and war. 6 credits, HU, RAD; HI, IS, Winter-R. Jackson
130. Religions in Japanese Culture An introduction to the major religious traditions of Japan, from earliest times to the present. Combining thematic and historical approaches, this course will scrutinize both defining characteristics of, and interactions among, various religious traditions, including worship of the kami (local dieties), Buddhism, shamanistic practices, Christianity, and new religious movements. We also will discuss issues crucial in the study of religion, such as the relation between religion and violence, gender, modernity, nationalism and war. 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
131. Living Jewish Texts: Reading, Wrestling, and Ritualizing In this course we will read a range of Jewish texts, from the Biblical to modern, to consider the role that texts have played in the construction of Jewish beliefs, practices, identities, and communities. We consider how these texts engage in dialogue with one another across time and place and have been and continue to be brought to life-interpreted through rituals, literature, art, film, and music. We will explore how different groups (from Ultra-Orthodox to feminists) have wrestled with these texts and reinterpreted as them sources of
theology, law, ritual practice, and creative inspiration. 6 credits, HU; HI, Offered in alternate years, Winter-S. Sippy
132. Patriarchs, Priests, Prophets and Poets (Hebrew Bible) The central religious beliefs and moral values of ancient Israel will be explored both in relation to other ancient Near Eastern cultures and as the basis of later developments in Judaism and Christianity. Attention will also be given to the diversity of literary genres exemplified in the Hebrew Bible and to the problems of interpreting biblical texts. 6 credits, HU; HI, Not offered in 2010-2011
133. Jesus, Paul, and Christian Origins (New Testament) This course introduces students to the diverse literature and theologies of the New Testament and to the origins and social worlds of early Christian movements. Possible topics include: Jesus and his message; Paul and womens' spiritual authority; non-canonical gospels (Mary, Thomas, Judas, etc.); relations between Christians and Jews in the first century; and more. Attention is given to the interpretation of New Testament texts in their historical settings, and to the various ways contemporary scholars and groups interpret the New Testament as a source for theological reflection. 6 credits, HU; HI, Not offered in 2010-2011
134. The Qur'an An exploration of the most influential single authority for Muslims world-wide, the Arabic text received by the prophet Muhammad in the seventh century known as "The Recitation," or Qur'an. We will investigate questions regarding its transmission, redaction, interpretation, and ritual uses. Our major concern will be to utilize the contents of the Qur'an as a window on the Islamic worldview, and to consider issues that arise from diverse attempts to read and understand it in the context of contemporary Muslim experience. 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
135. Women and Religion: India and Abroad This course addresses some of the most challenging questions facing the combined study of religion, gender, and post-colonialism today, using case studies from India, Europe and the United States as starting points. What do we mean when we talk about "religion" and its scholarly study? Do "women" constitute a legitimate category of analysis? How might women and men manipulate an inherited tradition to creative ends, and how might these ends be related to gender and power? This class focuses on Christianity and Hinduism, and other religions as time allows. 6 credits, HU; HI, Offered in alternate years, Fall-K. Bloomer
136. The State of Judaism in the State of Israel The course will explore the complex relationship between Judaism and social-political realities of modern Israel. What is the role of Judaism in the modern, largely, secular, State of Israel? How and why did the early Zionists' anti-religious ideology give rise to such enormous religious passions? How have traditional Jewish practices been adapted to this new environment? Readings will range from biblical texts to the works of contemporary "postZionist" Israeli thinkers. This course is part of the off-campus winter break program to Israel. Winter break programs involve two linked classes in fall and winter terms, and this class is the first class in the sequence. 6 credits, $H U ; H I$, Not offered in 2010-2011
137. Research on Israel This course is the second part of a two-term sequence beginning with Religion 222 and will give students an opportunity to develop a research project on a topic of their choice on the state of Judaism in Israel. It is anticipated that research projects will be shared in a public symposium at the end of the term. 6 credits, ND; HI, Not offered in 2010-2011
138. Women and Christianity This course first examines women's historical involvement in Christianity and the various views on women held by influential Christians of the past. It then probes literary and theological texts that reflect the efforts of contemporary thinkers to understand and transform a tradition they find both oppressive and liberating where justice for women is concerned. A diverse range of contemporary authors (including African-American, Chinese-American, EuropeanAmerican, and Mexican-American) invite reflection on topics such as God-language, Christian missions, race, class, spirituality, sexuality, and environmental justice. 6 credits, HU; HI, Not offered in 20102011
139. Catholicism An introduction to the histories, cultures, doctrines, and practices of Catholicism. We will explore aspects of the global history of the Catholic tradition, distinctively Catholic theologies and ethics, liturgical and sacramental practices, the roles of the hierarchy and the laity, and popular religiosity among Catholics in the Americas. Our sources will include primary historical texts, official church documents, contemporary theology, literature, and film, and field study. Previous study of Christianity is recommended but not required. 6 credits, HU; HI, Not offered in 2010-2011
140. Feminism, Liberation, and the Bible Is the Bible an important text of resistance literature for human liberation or is it a hegemonic tool for the sacralization of social injustices such as female subordination, slavery, and colonialism? For feminist interpreters of the Bible, the answers are equivocal. This course will survey evolving feminist engagement with the Jewish and Christian canons. Whereas issues of race, class and colonial legacy can complicate notions of gender, this survey will be done in conversation with other important modes of political criticism of the Bible (including African and Native American, Latin American, Post-Colonial, and Queer readings). 6 credits, $H U, R A D ; H I$, IDS, Not offered in 2010-2011
141. Liberation Theologies An introduction to black theology, United States hispanic theology, Latin American liberation theology, and feminist theology through writings of various contemporary thinkers. Attention will be directed to the social settings out of which these thinkers have emerged, their critiques of "traditional" theologies, and the new vision of Christian life they are developing. Previous study of Christianity is recommended but not required. 6 credits, HU, RAD; HI, Not offered in 2010-2011
142. Christian Ethics How do Christians live, imagine, and speak of the moral life? In this course, we will explore central questions in Christian ethics (such as love and justice, sin and free will, the authority of Scripture in ethics) in the thought of historical and contemporary Christian thinkers, from the Gospel writers and Augustine to Martin Luther King, Jr. and John Paul II. We will also consider practical questions in Christian ethics through a particular focus on sexual ethics and the ethics of war and peace. Previous study of Christianity and/or ethics is recommended but not required. 6 credits, HU ; HI , Not offered in 2010-2011
143. Feminist Theologies How have feminist theologians attempted to understand and transform religious traditions they find both oppressive and liberating where justice for women is concerned? This course examines works by feminist scholars (from Christian and Jewish traditions) who have sought to re-think fundamental categories, symbols, questions, and methods related to the study of scripture, ethics, and theology. We explore the ways in which theologians from various cultural backgrounds have worked toward women's empowerment through critiques of sexism, racism, and colonialism, and through feminist models of community, identity, and justice. Topics include: gender and biblical interpretation, God-language, redemption, sexual ethics, and ecofeminism. 6 credits, $H U, R A D ; H I, I D S$, Not offered in 2010-2011
144. From Luther to Kierkegaard This course engages classic theological questions posed by Protestant theologians from the Reformation through the modern period. Issues include: the nature of God, the human condition, faith and reason, scriptural authority, the meaning of salvation, the place of Christianity in culture, the relation between Christianity and modernity, and justice and equality. Focus is on the interpretation of texts (by thinkers such as Luther, Calvin, Kierkegaard, and King) in their historical contexts and contemporary relevance. We also explore the dialogue between traditional Protestant theology and the ideas arising out of evangelicalism, the Enlightenment, existentialism, and liberation movements of the twentieth century. 6 credits, HU, WR; HI, WR2, Offered in alternate years, Spring—L. Pearson
145. Way of Wisdom: Job and Ecclesiastes How do religious people respond when their time-honored doctrines no longer explain their experience? How can one believe in a benevolent God in the face of suffering, or in life's essential goodness in the face of human mortality? These are some of the questions
that troubled the ancient writers of the biblical books of Job and Ecclesiastes. This course explores these two classic examples of "wisdom literature," as well as the efforts of contemporary writers to build on their insights. Prior study of the Bible is not a prerequisite. 6 credits, HU; HI, Not offered in 2010-2011
146. Gender and Religion in the African Diaspora This course explores the role of women and constructions of gender in four religions of the African Diaspora (Haitian Vodou, Cuban Lucumí/Santería, Brazilian Candomblé/Macumba, and Jamaican Rastafarianism), as well as one continental West African tradition. The course's main objectives are to acquaint students with the range of prominent positions that women have held in these religions; to investigate how these religions have organized women's ritual practice; to draw distinctions between the ideal female religious subject and the everyday experiences of actual women in these traditions; and to consider their worship and representation of female deities. 6 credits, HU; HI, Not offered in 2010-2011
147. Envisioning Vodoun: Haitian Popular Religion in Historical Perspective This course explores a religious tradition vital to the culture of Haiti, examining Vodoun against its African background, in its practice in Haiti and the Haitian diaspora, and over against its depiction in American popular culture as "Voodoo." 6 credits, HU; HI, Not offered in 2010-2011
148. Native American Religious Freedom This course explores historical and legal contexts in which Native Americans have practiced their religions in the United States. Making reference to the cultural background of Native traditions, and the history of First Amendment law, the course explores landmark court cases in Sacred Lands, Peyotism, free exercise in prisons, and sacralized traditional practices (whaling, fishing, hunting) and critically examines the conceptual framework of "religion" as it has been applied to the practice of Native American traditions. Service projects will integrate academic learning and student involvement in matters of particular concern to contemporary native communities. 6 credits, HU, RAD; HI, IDS, Spring-M. McNally
149. Prophetesses and Prostitutes, Murderesses and Matriarchs: Gender Roles in the Hebrew Bible This course focuses on the roles and activities of women in the Hebrew Bible. By carefully examining selected stories, we will discover that women-- as poets (Deborah), thieves (Rachel), disguisers (Rebekah) and betrayers (Delilah)--had manifold ways of exercising power. We will read accounts of a woman who dresses as a prostitute (Tamar), an actual prostitute (Rahab), a witch (the witch at Endor), evil queens (Athaliah and Jezebel), and erotic poetry in a woman's voice (the Song of Songs). We will analyze these stories through the lens of modern Biblical scholarship and emphasize current feminist approaches to Biblical studies. 6 credits, HU; HI, Not offered in 2010-2011
150. Religion and the Black Freedom Struggle This course will examine the key events, figures, philosophies, tactics, and consequences of the modern civil rights movement in United States. The period from 1955-1965 will receive special attention, but the roots of the freedom struggle and the effect on recent American history will also be considered. Studying primary source documents, film, secondary literature, and music will facilitate understanding of what is widely regarded as the most effective mass protest movement in modern American history. Emphasis will be given to the centrality of religion for the social ethics of key movement participants. 6 credits, HU; HI, IDS, Offered in alternate years, Winter-A. Wiley
151. Religion, Law, Religious Law This course will examine the burgeoning field of "religion and law" through asking two questions central to its inquiry: 1) How does religion become law? 2) How does secular law extend into domains to which religion also stakes claims through the adjudication process? To answer the first question, we'll examine the development of Islamic sharia from "God's Path" into "religious law" in its codification and canonization by the modern state. To answer the second question, we'll look at American First Amendment jurisprudence, examining recent cases to determine how the law defines "religion" and what assumptions about religion such definitions legislate. 6 credits, HU ; HI , Offered in alternate years, Winter-N. Salomon
152. Religion and American Public Life This course explores the contentious place of religion in American public life. What roles do religious organizations and religious motivations play in the public arenas of electoral politics, policy-making, schools, courts, social service delivery, media, and marketplace? What roles ought they play? In a pluralistic society, how are Americans to balance diverse moral positions with our shared civic life? Engaging the insights of sociologists of religion, legal scholars, ethicists, political theorists, and cultural critics this course will refine the language with which we address such broad questions. Students will apply those insights to focused critical analyses of issues they choose. 6 credits, HU, WR; HI, WR2, IS, Not offered in 2010-2011
153. Theravada Buddhism Study of Buddhism's beginnings in India and its spread to Sri Lanka and Southeast Asia, where it is a dominant religious and cultural form. The first part of the course focuses on Theravadin interpretations of the Buddha's life and basic teachings, as found in the Pali canon. The second part of the course analyzes Buddhism's function as a cultural system in one or more Theravadin society, with special attention to such issues as Buddhist legitimization of secular power, popular religious practices, the relation between monks and laity, and the role of women. Religion 150 recommended but not required. 6 credits, $H U, W R, R A D ; H I, W R 2, I S$, Not offered in 2010-2011
154. Tibetan Buddhism Against a background of the essential ideas and practices of Mainstream and Mahayana Buddhism, this course examines the development within Mahayana of the esoteric traditions of Tantra, and then traces the rise and development of the complex, Tantra-dominated Buddhism of Tibet. Topics include the role of the lama, ideas about death and reincarnation, tantric meditative practices, debates about such doctrines as emptiness and skillful means, the place of women, and the history of the Dalai Lamas. Religion 150 is recommended but not required. 6 credits, $H U, W R, R A D$; HI, WR2, IS, Fall—R. Jackson
155. Zen Buddhism An exploration of the "meditation" school of East Asian Buddhism. We will trace Zen back to its purported origins in India, through its development in China, on to its efflorescence in Japan, where it became a powerful cultural and political force. We will explore the paradoxes and practices of Zen; its impact on Japanese religion, aesthetics, and philosophy; and its complex ethical implications. We also will consider Zen's place in Korea and Vietnam, as well as in America, where it has influenced art, literature, and religion for over a century and remains perhaps the best known of all Buddhist traditions. 6 credits, HU, WR, RAD; HI, WR2, IS, Offered in alternate years, Spring- $\boldsymbol{R}$. Jackson
156. Social Engagement in Asian Religions This course explores religions in contemporary Asia while focusing on their energetic engagement with social and political issues and crises. In Vietnam, Burma, and Tibet, for example, Buddhists famously protested against war and violence by quietly marching, fasting, or immolating themselves. Yet in Japan and China, many religious groups are criticized for having justified imperialism, engaged in terrorist activities, or become mere money-making machines. Can religions serve as a vehicle of social and political activism? Do they potentially change or passively maintain the status quo? We will critically examine both examples and counter-examples of social engagement in Asian religions. 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
157. Modern Hinduism: Encounters with the West A controversial statement: "Modern Hinduism was defined in engagement with Western discourses of 'religion.'" This course will begin with the ideas of such prominent Hindu thinkers as Rammohan Ray, Vivekananda, Savarkar, and Gandhi, looking to a range of historical and critical materials to ground their voices in the experience of colonialism. We'll move on to consider contemporary contexts: strains of Indian nationalism; migration and the growth of diasporic Hindu communities overseas; conversion and the transnational spread of modern guru movements; consumerism and globalization. Throughout we'll remain mindful of the question: Why is the theme of this class controversial? 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
158. Buddha Buddha, "the awakened," is the ideal being--and state of being--in all Buddhist traditions.

This course will explore the contours of the Buddha-ideal as revealed in legendary narratives, devotional poems, ritual texts, visionary accounts, philosophical treatises, meditation manuals, and artistic representations. We will draw primarily on classical South Asian and Tibetan sources from the Theravada, Mahayana, and Tantric traditions, but also will consider East Asian (e.g., Pure Land and Zen) conceptions of Buddha and modern reinterpretations of the idea. In addition, we will compare Buddha with the "ideal being" of other traditions, e.g., Brahman, the Dao, and God. 6 credits, $H U, W R$, RAD; HI, WR2, IS, Not offered in 2010-2011
258. Women and Buddhism This course explores various, often contradictory, images and roles of women in Buddhism from cross-cultural and comparative perspectives. First, we examine how women's sexuality and spiritual capacity are perceived in different strands of Buddhim that were developed in South and East Asian societies. Then we probe the ways in which Buddhist ideas both reflected and prescribed the gender roles practiced in these societies. Special attention will be given to women's efforts to understand and appropriate the resources of Buddhist traditions to address the social problems they encounter. 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
261. Beyond Hindu and Muslim: The Lives of Indian Saints Charismatic teachers--Hindu and Sikh gurus and Muslim pirs--have been prominent as interlocutors between religious communities in South Asia. This course will examine how this cross-pollination produces a mutual flowering in the early modern period, with Bhakti and Sufism developing kindred concepts and attitudes, including a complementary mistrust of institutional authorities, a fondness for rhetorical paradox, and an emphasis on eroticism and mystical ecstasy. We will consider studies of the careers and cults of holy men and women from the medieval period to the present alongside critical readings of primary texts, including poems, songs, and films. 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
263. Sufism This course explores the Islamic devotional tradition known as Sufism. We will spend the term both re-situating Sufism within the Islamic tradition of which it is a part (but apart from which it is too often studied) as well as disentangling Sufism from its common reduction to "Islamic mysticism." We will come to understand Sufism's unique contributions to Islamic theology, liturgy, theories of religious knowledge, structures of religious authority and even political theory and jurisprudence. Further, we will examine a history of Sufism, paying particular attention to its development from an elite theosophical stance to a popular organized phenomenon. 6 credits, HU; HI, IS, Offered in alternate years, Spring—N. Salomon
264. Islamic Politics The specter of Islamic politics haunts much policy discussion in the United States and abroad. Behind phrases such as "radical Islam," "political Islam," and "liberal Islam" do we understand what a political theory which draws its inspiration from an Islamic tradition means? Can Muslim political positions/institutions exist comfortably in a secular, democratic state or international order, or must they always necessarily be at odds with them? This course will examine scriptural paradigms in Muslim politics, several modern Muslim political theorists, and contemporary attempts at Islamic political formations in Iran, Sudan and Turkey to shed light on this complicated topic. 6 credits, HU, RAD; HI, IS, Offered in alternate years, Fall-N. Salomon
266. Islamic Conversions: The Muslim Presence in South Asia A survey exploring Islamic orthodoxies and heterodoxies in South Asia. We will chart the process of Islam's Indianization through a sequence of historical readings. The question "What's South Asian about this?" then opens the way to ethnographic perspectives on themes of contemporary practice; possession and healing, dress and diet, ideology and relations with state and other authorities, caste. In the last third of the course we turn to representative literary texts for a view of how a distinctively Muslim cultural sensibility has come to be identified in both Pakistan and India with the language and letters of Urdu. 6 credits, $H U, R A D ; H I, I S$, Not offered in 2010-2011
267. Contemporary Jewish Thought This course introduces students to contemporary (Post-World

War II) Jewish theology. We will explore the creative and diverse ways in which modern Jewish thinkers have combined elements of modernity (e.g. the emphasis on autonomy and freedom) with traditional Jewish beliefs about God, revelation, and redemption. The course will include representative selections from rationalists and mystics, feminists, traditionalists and post-modernists. Prior study of religion and/or philosophy will be helpful. 6 credits, HU; HI, Not offered in 2010-2011
268. Encountering Islam: Dialogue and Difference This course explores discourses that emerged as Islamic traditions encountered other cultures, from the medieval and colonial to the modern. Reading texts--historical, fictional, and ethnographic--we will consider how different religious, political, civic and cultural formations (i.e. Judaism, Christianity, Hinduism, Feminism and the Secular State) engage with Islam. Focused on questions about representation--the perception of Islam by "others," and Muslim self-representation--we will explore the nature of dialogue and alliance, both on the interfaith community and geo-political levels. Students will also explore Minnesota's varied Muslim populations and the nuances at work in contemporary American encounters with Islam. 6 credits, HU; HI, Not offered in 2010-2011
269. Jewish Ethics How do religious beliefs shape our moral perspectives? In this course we will examine the ways in which this has happened within the Jewish tradition, paying attention to both ethical theory (e.g., the relationship of law and ethics) and issues in applied ethics (e.g., war, sexual ethics, abortion). Both traditional and contemporary approaches to Jewish ethics will be examined. Prior study of religion and/or ethics will be useful, but is not required. 6 credits, HU; HI, Winter-L.

## Newman

270. Philosophy of Religion A study of classic issues in the philosophy of religion and philosophical theology. Possible topics include: the existence and nature of God; the status and nature of religious experience; the problem of evil; the meaning of faith, belief, and truth; definitions of the self and salvation; and the significance of religious pluralism for claims about truth and God. Readings are drawn from the work of modern and contemporary philosophers and theologians. Prerequisites: Previous work in religion or philosophy will be helpful but is not required. 6 credits, $H U, W R ; H I, W R 2$, Not offered in 2010-2011
271. Religious and Moral Issues of the Holocaust This course explores the profound theological and moral issues raised by the Nazi policy of systematic genocide. Attention will be given to a wide range of issues, including Jewish and Christian responses to these events, collaboration with the perpetrators, spiritual resistance, whether there are "unforgivable" crimes, and the use of scientific data from experiments on concentration camp inmates. Permission of the instructor required. 6 credits, $\mathrm{HU} ; \mathrm{HI}$, Spring-L. Newman
272. Performing Tradition: Art, Religion, and Globalization Visit a museum and it is not uncommon to find--along side visual displays--exhibitions of "culture" in the form of performances. Building upon the idea that "art is a bridge to understanding," festivals, fairs, and classrooms have become venues for artists and religious leaders to bring the global local. Tracing the history of exhibiting cultures, beginning in the late nineteenth century, we will consider how religions and traditions are represented in different contexts with a range of political and social implications. We will also work with artists-inresidence to consider the role performance plays in constructions of rituals, religions and cultures. 6 credits, HU; HI, IDS, Offered in alternate years, Spring-S. Sippy
273. The Virgin of Guadalupe This course examines the apparition of the Virgin Mary called the Queen of Mexico and Patroness of the Americas, placing particular emphasis on the diverse appropriations of her image. Beginning with her precursors in the Old and New World, we approach Guadalupe as a tool with which to pry open questions central to Mexican history and identity, including issues of gender, ethnicity, class, nationalism, and representation with regard to Guadalupe and devotional objects more generally. The course concludes with a consideration of the Virgin's
contemporary materialization as a symbol to be not only displayed and consumed, but also embodied. 6 credits, HU, RAD; HI, Not offered in 2010-2011
274. Goddesses This class examines goddesses both ancient and modern, from Mesopotamia, Europe, South Asia, West Africa, the Caribbean, and Latin America. It introduces some of the world's most complex deified figures through their mythical narratives, visual representations, and ritual practices. This course places goddess worship within the context of human gender roles and relations and considers theoretical issues regarding the goddess's function as a role model for women. The course pays particular attention to issues of iconography, sacrifice, the political and social significance of goddess worship, the phenomenon of goddess possession, and what goddesses do for--and with--men. 6 credits, HU; HI, Not offered in 2010-2011
275. Religion and Music in Cuba This course tells the story of Cuba's religious formations through their musical genres. Readings draw from ethnomusicology, history, anthropology, and religious studies to provide an understanding of the role music plays in celebrating deities, ancestors, and community. We focus on the relationship between music and dance, spirit possession, and mythology, as well as the construction of nation, race, and gender through music. Among the music to be considered is that of the all-male secret society Abakuá; French-Haitian Tumba Francesa; the initiatory traditions of Lucumí and Palo Monte; and Havana-based hip-hop. Some Spanish language competence not a prerequisite but strongly recommended. 6 credits, HU; HI, Not offered in 2010-2011
276. Many Marys The history of Christianity usually focuses on Jesus: the stories and doctrines that have revolved around him. This course will focus on Mary and the many ways she has contributed to the various lived traditions of Christianity. We will, for example, consider the mother of Jesus (Miriam, as she was first called) as she has figured in literature, art, apparition, and ritual practice around the world. We will also consider Mary Magdalene, her foil, who appears in popular discourse from the Gnostic gospels to The Da Vinci Code. Case studies, texts, images, and film will be our fare. 6 credits, HU; HI, Offered in alternate years, Winter-K. Bloomer
277. Women and Religion: India and Abroad This course will address some of the most challenging questions facing the combined study of religion, gender, and post-colonialism today, using case studies from India, Europe and the United States as starting points. What do we mean when we talk about "religion" and its scholarly study? Do "women" constitute a legitimate category of analysis? How might women and men manipulate an inherited tradition to creative ends, and how might these ends be related to gender and power? We will concentrate on two religions--Hinduism and Christianity--while investigating other religions and regions as time allows. 6 credits, HU; HI, Offered in alternate years, Fall-K. Bloomer
278. Issues in the Study of Religion This seminar is designed to acquaint junior religion majors with some of the basic theories, methods, and problems in the field of religious studies. 6 credits, $\mathrm{HU} ; \mathrm{HI}$, Winter-L. Pearson
279. Gender and God-Talk: Christian Feminist Theologies How have thinkers from Black, White, Asian, and Latina backgrounds responded to the claim that Christianity is hopelessly patriarchal, which philosopher Mary Daly argued for so strongly in Beyond God the Father three decades ago? This seminar probes Daly's challenge and the ensuing developments in Christian biblical, ethical, and theological studies. Catholic and Protestant writers from within and beyond the United States will be studied on such topics as gender and biblical interpretation, God-language, redemption, the Virgin Mary, sexual ethics, and ecofeminism. Some prior knowledge of Christianity is highly recommended. 6 credits, HU; HI, Not offered in 2010-2011
280. Scriptures and Hermeneutics: Class, Gender and Sexuality This theory seminar will attend to the key methods and questions that can be applied to religious texts, such as the Hebrew and Christian scriptures, when assessing the sexual moral economy they promote, presuppose, or have been
interpreted to contain. Among issues covered: kinship systems, gendered poverty, sex and disability law, violence, the economics of caring labor, and racism as sexual ideology. Theory texts by Marcuse, Fanon, Rubin, Foucault, Irigaray, Butler, and Sandoval, among others, are surveyed for application in order to clarify relationships between sexual hierarchies, religious systems, and the social and economic struggles of various groups for human dignity. 6 credits, HU; HI, IDS, Offered in alternate years, Spring-A. Ipsen
281. Approaching the Jewish Body Called the "People of the Book," it is no wonder that it is texts that most think of when they study Jews. But what of Jewish bodies--the importance of circumcision in making a covenanted body, of embodied rites (eating, immersing, praying), of "big noses" and "hidden horns" in stereotypes? This course will consider how Jewish bodies have been constituted ritually, textually, politically, and theologically. We will pay particular attention to matters of gender and sexuality, as we read classical and modern sources to consider the ways Jewish bodies have been made and represented (by themselves and others) over time. 6 credits, HU; HI, Not offered in 2010-2011
282. Genesis This course will address two central concerns through an in-depth study of the book of Genesis: hermeneutics--the problems and possibilities of textual interpretation, and theology--the ways in which religious communities and individuals reflect on the meaning of sacred events. This important biblical book raises an extraordinary range of issues, including cosmogony, the nature of humankind, faith, familial relationships, politics, sex and violence. Materials will be drawn from both classical and modern commentaries. Prior work in literature or religion helpful, but not necessary. 6 credits, HU ; HI , Not offered in 2010-2011
283. Theology, Pluralism, and Culture Is there one Christianity or are there many Christianities? Is Christianity separate from, or shaped by, its surrounding culture? Do religious traditions have boundaries? How and why do beliefs and doctrines change? How much should contemporary culture influence the ways we talk about God? In this course we analyze the complex relationship between theology and culture. We consider the influence of cultural identity on religious belief and practice, and we learn about theories of tradition and culture from a variety of disciplines. Throughout the term we explore the implications of relativism, pluralism, and diversity for theological reflection on the identity of Christianity. 6 credits, HU; HI, Not offered in 2010-2011
284. Radical Pacifism This seminar will explore the emergence of pacifism as a modern tradition and the development of pacifist thinking and activism from the Mexican-American War to the War on Terror. Students will endeavor to understand the religious beliefs, ethical commitments, and ontological assumptions that inform pacifist criticism(s) of modern social order. And consider how pacifism relates to other modern social theories, including Marxism, anarchism, and feminism. Emphasis will be given to the writings of American pacifists, including William Garrison, Adin Ballou, Jessie Hughan, Jane Addams, Dorothy Day, and Martin Luther King Jr., and to the histories and philosophies of major peace organizations. 6 credits, HU; HI, Offered in alternate years, Winter-R. Jackson
285. Lived Religion in America The practices of popular, or local, or lived religion in American culture often blur the distinction between the sacred and profane and elude religious studies frameworks based on the narrative, theological, or institutional foundations of "official" religion. This course explores American religion primarily through the lens of the practices of lived religion with respect to ritual, the body, the life cycle, the market, leisure, and popular culture. Consideration of a wide range of topics, including ritual healing, Christmas, cremation, and Elvis, will nourish an ongoing discussion about how to make sense of lived religion. 6 credits, HU; HI, IDS, Not offered in 2010-2011
286. Emptiness An exploration of the central concept of Mahayana Buddhism, shunyata, translated as emptiness. We will trace prefigurations of emptiness in early Buddhism, then examine its classical expression in the Perfection of Wisdom sutras and the treatises of the Madhyamaka school, and its gnostic application in tantric traditions. Throughout, we will try to understand how the "emptiness
factor" affects basic questions in Buddhist metaphysics, epistemology, meditation-theory, and ethics. Our primary focus will be on Indian and Tibetan texts, but we also will consider interpretations from East Asian and modern Buddhist writers, and reflect on emptiness vis à vis Western philosophies. 6 credits, HU, WR, RAD; HI, WR2, IS, Winter-R. Jackson
287. Hindu Hierarchies: Caste in Theory and Practice This seminar will investigate two aspects of India's "peculiar institution:" caste hierarchy as lived in historical and present-day Hindu communities; and discourses of caste as conceived, justified, and reformed within Hindu thought. Alongside mythological and shastric texts taken from the classical Brahmanical corpus, we will consider a range of alternatives to orthodox caste dharma (varnashramadharma) as advanced by lower-caste voices, exponents of Bhakti devotionalism, and modern critics such as Gandhi, Ambedkar, and Periyar. We will also pursue critical readings of analytic frameworks developed to study caste, foregrounding the work of theorists such as Dumont, Srinivas, Beteille, Marriott, and Dirks. 6 credits, HU, RAD; HI, IS, Not offered in 2010-2011
288. Buddhism and Ecology Both environmental scholars and activists have been vigorously discussing the role that religion plays in shaping our attitudes towards the environment. In this course, we carry on this conversation through a unique vantage point, Buddhism. Western environmentalists often assume Buddhism to be "eco-friendly." Together, we will critically rethink this benign image, exploring the parallels and the divergences between Buddhism and ecological practice, as well as the problems and the prospects of Buddhist environmentalism. 6 credits, HU; HI, IS, Not offered in 20102011
289. Zen, Nationalism, and Orientalism To most people in the West, the term "Zen" means a religion of serene meditation, simple aesthetics, healthy food, or the key that unlocks the art of just about anything. We will challenge the commonly accepted images of Zen and reveal its active (and often problematic) engagement with social and political issues in modern and contemporary societies. Why did Japanese Zen monks justify and participate in Japan's modernization, nationalism, and imperialism? How did they reinterpret Zen when trying to introduce it to the Western audience? How did Westerns, in turn, understand and represent Zen as a religion of mysterious orient? 6 credits, HU, RAD, HI, IS, Not offered in 2010-2011
290. Spirit Possession This course considers questions of agency in relation to religion, gender, and spirit possession. Through surveying a number of works on spirit possession--recent and past, theoretical and ethnographic--we will analyze representations of the female subject in particular and arguments about agency that attend these representations. This class will explicitly look at post-colonial accounts of spirit possession and compare them to Euro-American Christian conceptions of personhood. We will consider how these Euro-Christian conceptions might undergird secular-liberal constructions of agency, and contribute to feminist ideas about the proper female subject. 6 credits, $\mathrm{HU} ; \mathrm{HI}$, Offered in alternate years, Spring-K. Bloomer
291. Radical Critiques of Christianity This course introduces students to some of the most radical critiques brought against the foundations of Christian theology (by philosophers and theologians, outsiders and insiders, alike) in the modern period. We examine critiques concerning the authority and historical veracity of scripture, the nature and status of Christian doctrines, the true meaning of faith, the relation between Christian theology and oppressive power, and the value of Christian morality. We also consider the work of Christian theologians who have embraced these critical perspectives and who have put them to use in their efforts to reform and redefine Christianity. Prerequisites: Prior coursework in philosophy or Christian theology is desirable, but there is no prerequisite for the course. 6 credits, HU ; HI, Not offered in 2010-2011
292. Religion and Nationalism From the pageantry of patriotic rituals to the bloody sacrifices of martyrdom, the link between religion and nationalism is unmistakable. In this course, we will ask: Is
nationalism itself a religion? How does religious identity support and/or undermine nationalism? Is religious nationalism necessarily violent? Is it compatible with democracy? What are the religious ethics of nationalism? Drawing on diverse disciplines, we will focus on the dynamics of religion and nationalism in selected cases (examples may include the United States, Ireland, Israel, and the former Yugoslavia). We will conclude by considering religious responses to the problems (and possibilities) of nationalism. Background in Religion recommended, but not required. 6 credits, HU; HI, Not offered in 2010-2011
293. Senior Research Seminar This seminar will acquaint students with research tools in various fields of religious studies, provide an opportunity to present and discuss research work in progress, hone writing skills, and improve oral presentation techniques. Prerequisite: Religion 300 and acceptance of proposal for senior integrative exercise and instructor's permission. 6 credits, ND; HI, Winter-M. McNally
294. Integrative Exercise 3 credits, $S / N C$, $N D$; $N E$, Winter, Spring—Staff

## Other Courses Pertinent to Religion

ARTH 164 Buddhist Art (Not offered in 2010-2011)
HIST 130 The Formation of Christian Thought (Not offered in 2010-2011)
HIST 230 Institutional Structure and Culture in the Middle Ages (Not offered in 2010-2011)
HIST 238 The World of Bede (Not offered in 2010-2011)
HIST 238 Topics in Medieval History: Church, Papacy and Empire (Not offered in 2010-2011)
HIST 266 History of Islam in India
HIST 278 Religious Orthodoxy and Deviance in New Spain
HIST 333 Iconoclasm (Not offered in 2010-2011)
HIST 360 Muslims and Modernity (Not offered in 2010-2011)
SOAN 260 Myth, Ritual, and Symbolism

## RUSSIAN (RUSS)

Chair: Professor John Roger Paas (German)
Professors: Laura Goering, Diane M. Nemec Ignashev
Senior Lecturer: Anna Mikhailovna Dotlibova
Students considering language study outside the Western European offerings will find Russian a refreshing change. In our first-year sequence we cover the fundamentals with equal emphasis on speaking, listening, writing, and reading. Traditional materials are supplemented by fairy tales, folk songs, rock music video, film clips and internet materials. By the end of Russian 204, students are able to read short prose by Chekhov, Dostoevsky, and Tolstoy, and to communicate functionally with native speakers. Language courses beyond 204 address contemporary Russian cultural and social issues while focusing on skill development at the intermediate (205), and advanced level (301). Students with precollege Russian, either acquired or native, should consult the department for placement information.

## Literature and Cultural Studies

We teach a variety of courses in English translation with no prerequisites (230-295). Courses at the 330-395 level that are conducted entirely in Russian aim to expand students' linguistic range as well as their understanding of analytical techniques and cultural contexts. See individual listings below for prerequisites.

## Requirements for a Major

63 credits, including the following: Russian 205; 207 or 307 ; 12 credits of survey courses in English (Russian 150, 244, 255, 268); 18 credits numbered 330 or above, six of which will normally be Russian 395; and the integrative exercise. Up to six credits in Russian 301-308 can be counted toward the major. Remaining credits may be chosen in consultation with the adviser from: departmental offerings, study abroad, appropriate methodology courses, related field work, etc. Students are strongly advised to include Russian and Eurasian courses from other disciplines in their electives.

Study Abroad: Participation in foreign study programs is highly recommended for students majoring in the Russian field. For a description of the Carleton Moscow Program, consult the section "Off-Campus Studies." Departmental approval of credit for participation in overseas programs should be sought before leaving campus.

Certificate of Advanced Study in Foreign Language and Literature or Foreign Language and Area Studies: In order to receive the Certificate of Advanced Study in Russian, students must fulfill the general requirements (refer to Academic Regulations) in the following course distribution: six courses beyond 103, including 205 and two courses numbered 330 or above. Although courses for the certificate may be taken on a S/CR/NC basis, "D" or "CR" level work will not be sufficient to satisfy course requirements. Additional courses may be chosen from among other offerings in the Russian section, History 240-241, and Economics 231.

Language House: Students have the opportunity to immerse themselves in the language by living in the Language House. A native Russian Resident Associate provides opportunities for conversation practice and assists students in organizing a variety of cultural activities.

## Russian Courses

101. Elementary Russian For students with no previous training in or minimal knowledge of Russian. Simultaneous development of skills in speaking, reading, aural comprehension, writing. Students with prior instruction or who speak Russian at home should consult the department for placement information. Class meets five days a week. 6 credits, ND; NE, Fall-A. Dotlibova, L. Goering
102. Elementary Russian Continues Russian 101. Prerequisite: Russian 101 or placement. Class meets five days a week. 6 credits, ND; NE, Winter-A. Dotlibova, L. Goering
103. Elementary Russian Concludes introductory method of Russian 101-102. Prerequisite: Russian 102 or placement. Class meets five days a week. 6 credits, ND; NE, Spring-A. Dotlibova, L. Goering
104. Moscow Program: Beginning Grammar This course will focus on continued study of the fundamentals of Russian grammar, vocabulary expansion, and activation. This course is conducted by members of Moscow State University Philological Faculty and supervised by the program director. Prerequisite: For students who have just recently begun their study of the Russian language, having completed or tested beyond elementary Russian 102. 4 credits, ND; NE, Not offered in 2010-2011
105. Moscow Program: Beginning Phonetics This course is taken in combination with Russian 107. Students focus on the essentials of Russian pronunciation with preliminary work in intonation. This course is conducted by members of Moscow State University Philological Faculty and supervised by the program director. 2 credits, ND; NE, Not offered in 2010-2011
106. Moscow Program: Beginning Conversation This course is taken in combination with Russian 107. Emphasis on socially relevant material. This course is conducted by members of Moscow State University Philological Faculty and supervised by the program director. 3 credits, ND; NE, Not offered in 2010-2011
107. Contemporary Russian Culture and Society This course surveys the complexities and contradictions of contemporary Russia, which today struggles with geography, climate, ethnic and religious diversity, and the legacies of serfdom and official corruption. Course materials include visual
media (film, animation, computer graphics), short fiction (fairy tales, classical short works, and postmodern sci-fi), economic reviews, Chechnya reportage, and documentary. Course requirements: short papers aimed at the portfolio, occasional quizzes, final exam. No knowledge of Russian language or Russian studies assumed or required. No prerequisites. 6 credits, $A L$, WR, RAD; HI, WR2, IS, Not offered in 2010-2011
108. Intermediate Russian Continued four-skill development using texts and resources from a variety of sources. Emphasis on communicative skills. Prerequisite: Russian 103 or placement. Class meets five days a week. 6 credits, ND; NE, Fall-A. Dotlibova, L. Goering
109. Russian in Cultural Contexts In this course students continue to develop skills of narration, listening comprehension, and writing, while exploring issues of contemporary Russian life and consciousness. The issues are examined from the position of two cultures: American and Russian. The course draws on a variety of sources for reading and viewing, including the periodic press, film, and music. Prerequisite: Russian 204 or placement. 6 credits, ND; NE, IS, Winter-A. Dotlibova
110. Moscow Program: Intermediate Grammar This course aims at vocabulary expansion and the assimilation and activation of formulaic conversational structures and speech etiquette at the same time it develops familiarity with more complex principles of Russian grammar. This course is conducted by members of Moscow State University Philological Faculty and supervised by the program director. Prerequisite: Russian 205 or placement. 4 credits, ND; NE, Not offered in 2010-2011
111. Moscow Program: Intermediate Phonetics This course is taken in combination with Russian 207. Students focus on the essentials of Russian pronunciation and correction. Preliminary work in intonation will be offered. This course is conducted by members of Moscow State University Philological Faculty and supervised by the program director. 2 credits, ND; NE, Not offered in 20102011
112. Moscow Program: Intermediate Conversation This course is taken in combination with Russian 207. Emphasis will be placed on socially relevant reading materials. This course is conducted by members of Moscow State University Philological Faculty and supervised by the program director. 3 credits, ND; NE, Not offered in 2010-2011
113. Moscow Program: Russia East and West Students will read non-fiction and fiction that explores and illuminates Russia's dual identity as European and Asian. Literary readings will include fairy tales, saints' lives, and short prose and poetry by Pushkin, Gogol, Dostoevsky, Rasputin, Vampilov, and others. Through readings, excursions, and travel in European and Asian Russia students will place the readings in the large cultural context of contemporary Russian, both historical and contemporary. The evaluative exercise for this course will include a project and/or a final examination. 6 credits, $A L, R A D$; HI, IS, Not offered in 2010-2011
114. Moscow Program: Russia North and South Students will read non-fiction and fiction that explores and illuminates Russia's cultural identities along the axis of North-South. Literary readings will include fairy tales, saints' lives, and short prose and poetry by Pushkin, Lermontov, Tolstoy, Belov, Pristavkin, and others. Through readings, excursions, and travel to the Russian North and Black Sea areas students will place the readings in the large cultural context of contemporary Russia. The evaluative exercise for this course will include a project and/or a final examination. 6 credits, $A L, R A D$; HI, IS, Not offered in 2010-2011
115. Russian Literature in Translation: The Novel to 1917 A survey of representative works from the early nineteenth century to 1917. Close textual analysis will be combined with discussion of the evolution of the genre in its historical and cultural context. Works by Dostoevsky, Tolstoy, Gogol and others. No prior knowledge of Russian or Russian history is required. 6 credits, $A L, W R ; L A, W R 2, I S$, Winter-L. Goering
116. Russian Cinema: History and Theory This course offers an historical overview of Russian cinema from its inception before the revolution of 1917, through the Soviet epoch, and into the era of independent Russia. Focus on the history of the medium in its distinctly Russian context is complemented with an overview of Russian film theory as applied in analysis. No prior knowledge of Russian language or culture is required. All films will be subtitled. Format: two screenings per week, readings, discussion, short papers. 6 credits, AL, RAD; LA, IS, Not offered in 2010-2011
117. Dostoevsky An introduction to the works of Dostoevsky. Readings include Poor Folk, Notes from the Underground, and The Brothers Karamazov. Conducted entirely in English. No prerequisites and no knowledge of Russian literature or history required. 3 credits, AL; LA, IS, Spring-L. Goering
118. War and Peace Close reading and discussion of Tolstoy's magnum opus. Conducted entirely in English. No prerequisites and no knowledge of Russian literature or history required. 3 credits, $A L ; L A$, IS, Spring-L. Goering
119. Russian Fiction of the Soviet Period What avenues of literary expression are open to a writer when the government declares "socialist realism" to be the only acceptable artistic method? In this course we will read novels and short prose written in Russia between 1917 and 1991. Writers to be covered will range from those who conformed in varying degrees to governmental strictures to those who risked their lives to circulate their works underground or publish them abroad. Works by Olesha, Bulgakov, Pasternak, Solzhenitsyn, Tolstaia, and others. In translation. No prerequisite. 6 credits, $A L$, WR; LA, WR2, IS, Not offered in 2010-2011
120. Moscow Program: Advanced Grammar This course combines advanced work in Russian grammar (largely corrective) and fundamentals in composition, with conversational Russian. Prerequisite: at least 6-12 credits beyond Russian 205/-206. 4 credits, ND; NE, Not offered in 2010-2011
121. Moscow Program: Advanced Phonetics and Intonation This course is taken in combination with Russian 307. Students focus on corrective pronunciation and theory and practice of Russian intonation. This course is conducted by members of Moscow State University Philological Faculty and supervised by the program director. 2 credits, ND, Not offered in 2010-2011
122. Moscow Program: Advanced Composition This course is taken in combination with Russian 307. Materials will combine literary classics with the socially relevant. This course is conducted by members of Moscow State University Philological Faculty and supervised by the program director. 3 credits, ND; NE, Not offered in 2010-2011
123. Readings in Russian Language and Culture Advanced readings in Russian language and Russian culture selected in collaboration with Moscow University staff. Students will also have opportunities to attend specified classes offered by Moscow University Philological faculty and to consult with individual faculty . Prerequisite: Russian 307, 308, 309. 3 credits, ND; NE, Not offered in 2010-2011
124. Russia's Literature of the Uncanny A survey of Russia's literature of the fantastic, including: saints' lives, fairy tales, and works by writers such as Pushkin, Gogol, Dostoevsky, Leskov, Remizov, Grin, Platonov, A.N. Tolstoy, Kharms, Kataev, Sinyavsky, Pelevin, Petrushevskaia. This course is conducted in Russian. Prerequisite: Russian 205 or permission of the instructor. 6 credits, $A L$; $L A, I S$, Fall-D. Nemec Ignashev
125. Russian Poetry This course is about learning to read, analyze, understand, and translate Russian poetry, with focus on nineteenth- and twentieth-century writers. Conducted in Russian. Prerequisite: Russian 205 or permission of the instructor. 3 credits, AL; LA, IS, Not offered in 2010-2011
126. Pushkin A study of the major poetry, drama and prose of Russia's most important poet. Prerequisite: Russian 205 or permission of the instructor. 6 credits, AL; LA, IS, Not offered in 2010-2011
127. Russian Cultural Idioms of the Nineteenth Century An introduction to the names, quotations
and events that every Russian knows--knowledge which is essential to understanding Russian literature, history and culture of the last two centuries. We will study the works of Russian writers (Griboedov and Pushkin, Leskov and Dostoevsky), composers (Glinka, Mussorgsky, Rimsky--Korsakov and Tchaikovsky), artists (Briullov, Ivanov, the Itinerants) and actors (Mochalov, Shchepkin) in the context of social thought and the social movements of the nineteenth century. Conducted in Russian.
Prerequisite: Russian 205 or permission of the instructor. 6 credits, AL; NE, IS, Not offered in 20102011
128. Chekhov A study of Chekhov's short fiction, both as an object of literary analysis and in the interpretation of critics, stage directors and filmmakers of the twentieth century. We will also examine the continuation of the Chekhovian tradition in the works of writers such as Bunin, Petrushevskaia and Pietsukh. Conducted in Russian. Prerequisite: Russian 205 or permission of the instructor. 6 credits, $A L$; LA, IS, Spring-A. Dotlibova
129. Senior Seminar: The Cult of Stalin Drawing on materials from film, literature, architecture, and mass culture, we will examine the cult of Iosif Stalin during "the Leader's" lifetime and continuing into subsequent eras through both repudiation and periodic revivals. We will address the pagan and Christian foundations of the Stalin cult, as well as its connections with the cult of Lenin. Conducted entirely in Russian. Prerequisite: at least 6 credits at the level of Russian 330 or higher or permission of the instructor. 6 credits, AL; NE, Not offered in 2010-2011
130. Integrative Exercise 6 credits, $S / N C$, ND; NE, Fall—L. Goering, D. Nemec Ignashev

## SOCIOLOGY AND ANTHROPOLOGY (SOAN)

Chair: Professor Jerome M. Levi<br>Professors: Peter David Brandon, Pamela Feldman-Savelsberg, Jerome M. Levi, Beverly Nagel, Nader Saiedi, Nancy C. Wilkie<br>Visiting Professor: Verne A. (Van) Dusenbery<br>Associate Professor: Annette Nierobisz<br>Assistant Professor: Meera Sehgal<br>Visiting Assistant Professor: Elizabeth Coville<br>Adjunct Instructor: Adrienne Falcón<br>Joining two disciplines as it does, the Sociology and Anthropology Department at Carleton seeks to present a truly unified vision of disciplines, both in the major as a whole and in many of the individual courses. Our principal goal is to give students a comparative perspective on human societies, exploring the vast range of similarities and differences among them in space and time.<br>Unless otherwise noted, 110 or 111 is prerequisite for courses numbered 200 and above, though juniors and seniors lacking the prerequisite may apply to the instructor for permission to enroll. We recommend but not require that majors and students considering a major take both 110 and 111, preferably by the end of their sophomore year.

## Requirements for a Major

Seventy-two credits including: Sociology/Anthropology 110 or 111, 240, 330, 331, 400, and Sociology/Anthropology 239 or Mathematics 115 or 215 . Students must complete Sociology/Anthropology 239 or Mathematics 115 or 215 or earn a score of 4 or 5 on the Math AP Statistics exam before taking Sociology/Anthropology 240.

Students should plan on taking the theory courses, 330 and 331, and the research methods course, 240 no later than their junior year. The integrative exercise is spread out over the senior year, with most of the work falling in winter term. A maximum of 12 credits can be applied toward the major
from relevant courses in off-campus programs. CCST 210, ARCN 246 and ARCN 395 may be applied toward the major.

In keeping with our philosophy of comparative studies and commitment to understanding human societies other than the one we live in, majors are strongly urged to develop an in depth study of a culture other than their own. This may be done through regular courses, independent study, or on offcampus programs. Early in their junior year, students should discuss ways of integrating such an indepth study into their work in the major with their advisers.

## Sociology/Anthropology Courses

100. The Myths of Crime What is crime? Who is the typical offender? What percentage of the American population is victimized by crime? This course will examine popular answers to these and other pressing questions about crime and contrast them with sociological informed accounts. As a an Argument and Inquiry seminar, the course is designed to help students acquire a critical perspective on crime and more importantly, to separate fact from fiction. In the process students will learn how to locate and interpret sociological evidence, and how to assess theoretical accounts of crime. By the end of the course students will have a better sense of the larger sociological enterprise. 6 credits, AI, WRI, QRE, Fall-A. Nierobisz
101. Introduction to Anthropology An introduction to cultural and social anthropology which develops the theoretical rationale of the discipline through the integration of ethnographic accounts with an analysis of major trends in historical and contemporary thought. Examples of analytical problems selected for discussion include the concepts of society and culture, value systems, linguistics, economic, social, political and religious institutions, as well as ethnographic method and the ethical position of anthropology. 6 credits, SS, RAD; SI, IS, Fall, Winter, Spring-E. Coville, J. Levi
102. Introduction to Sociology An introduction to sociology, including analysis of the sociological perspective, culture, socialization, demography, and social class and caste institutions in modern industrial societies and cultures; stability and change in societies of the twentieth and twenty-first centuries. Pros and cons of various theoretical strategies will be emphasized. 6 credits, SS; SI, Fall-A. Nierobisz, N. Saiedi
103. Who Cares and Who Gets Care? Women and Health This course will focus on the organization of the health care system in the United States and its impact on women's health. We will explore the politics of women's health from the perspective of women of different races, ethnicities, classes and sexual orientations. Gender and the social construction of health and illness, and women's activism (as consumers and health care practitioners) shall frame our explorations of menstruation, sexuality, nutrition, body image, fertility control, pregnancy, childbirth, and menopause. We will focus on the medicalization of these processes and explore alternatives that center on reproductive justice. 6 credits, SS, RAD; SI, IDS, Fall—M. Sehgal
104. Culture and Politics in India India is a region of immense diversity where more than one billion people live. This course will explore social structures in India--through a focus on key areas of everyday life such as family, religion, economy, systems of stratification and social movements. Close attention will be given to religious nationalism, globalization and militarism as dominant trends affecting contemporary India. Questions we will consider include: How has India been represented in the Western imagination and why do such representations matter? What are the forces of modernity and tradition in India? What are the similarities and differences in systems of stratification in India and the United States? 6 credits, SS, RAD; SI, IS, Fall—M. Sehgal
105. Girls Gone Bad: Women, Crime, and Criminal Justice Criminologists agree that sex is a major correlate of criminal activity. Whether we examine official statistics, self-report data, or victimization surveys, the pattern is strong and persistent: males commit more crime than females and the types of
offenses males commit tend to be more serious. While crime is predominantly a male phenomenon, in this course we examine female criminality. In doing so, we learn about the social basis of criminal activity, the assumptions present in criminological theory, and the ways in which criminal justice practices are gendered. 6 credits, SS; SI, QRE, Winter-A. Nierobisz
106. Principles of Demography Demography is the scientific study of human populations. The field of demography has two branches: formal demography and population studies. In formal demography, quantitative data and techniques are used to calculate demographic measures such as population size, age structure, fertility rates, life expectancies and migration levels. In population studies, these demographic measures are set within a broader societal context. Students in this course will receive grounding in formal demography not population studies. Topics include measuring fertility, mortality, migration and marriage and life tables. This course requires intensive work in small groups. Prerequisite: Mathematics 115 or 215.6 credits, SS, WR; FSR, WR2, IS, QRE, Spring-P. Brandon
107. Social Welfare This course studies the social welfare system in the United States. The course reviews the historical, social, and cultural underpinnings of the nation's welfare system: then the course examines which groups are served and not served by the system. Several sections of the course examine the intellectual debates about the incentive structures of the United States welfare system and whether welfare reform have been effective in reducing welfare dependency. Time permitting, the United States welfare system is placed in comparative perspective. Prerequisite: Sociology and Anthropology 110 or 111, or consent of instructor. 6 credits, SS, WR; SI, WR2, Not offered in 2010-2011
108. Class, Power, and Inequality in America The processes, structures, and functions of stratification in advanced capitalist societies. Marxist, neomarxist, Weberian, and functionalist models of class analysis; theories of status attainment and mobility; comparative welfare states; the relationship between class, gender, and ethnicity; the relation of education to status attainment; class and socialization; and models of justice and rationality. Prerequisite: Sociology and Anthropology 111 or consent of the instructor. 6 credits, SS; SI, IDS, Winter-N. Saiedi
109. Law and Society Law has an impact on every aspect of our lives, from the conditions of our birth to the conditions of our death and everything else in between. As we enter the twenty-first century, the pervasiveness of law continues to grow. We begin this course by exploring the ubiquity of law and the implications of this for our day-to-day lives. Next we examine definitions of law, the development of law, and the extent to which law is shaped by the wider social and cultural contexts in which it is embedded. We conclude by examining specific issues such as legal consciousness, the legal profession, and law and social inequality. Readings include classic and contemporary theoretical works on law and society, and current empirical applications. 6 credits, SS; SI, Fall-A. Nierobisz
110. Anthropology of Humor Laughter is found in all human societies, but we do not all laugh at the same things. In this course we will discuss why, cross-culturally, some things are funny and others are not, and what forms humor may take (jokes, riddles, teasing, banter, clowning). We will look at such topics as joking relationships, evolutionary aspects of laughter and smiling, sexual inequality in humor, ethnic humor, and humor in religion and language. Some prior exposure to anthropology is desirable but not required. The main prerequisite for the course is a serious sense of humor. 6 credits, SS; SI, Not offered in 2010-2011
111. Global Migrations We look at causes of migration such as post-colonial conditions in the developing world that create political and economic instability; declining populations in the developed world that create labor needs; and human slavery and trafficking from countries with high poverty, unstable governments, and challenges to human rights. We study some of the largest-scale migrations: the Chinese, Indians, Jews, Japanese, German and Italians, and examine political instability in places where minority immigrant groups control nations' economic resources. Theoretical approaches include micro-economic 'push-pull' theories and macro-structural theories focusing on global conditions. 6
112. Social Movements In this course we will consider questions of how ordinary women and men have come together to reshape the societies in which they live and the difficult choices they have faced in the process. We will explore factors affecting the emergence, growth, structure and impact of social movements as their participants intentionally attempt to bring about social change, transform social relationships and reshape social values. Major theoretical perspectives (concerning collective behavior, resource mobilization, and new social movements) will be examined in light of some of the most important social movements from around the world. Prerequisites: Sociology and Anthropology 110 or 111 or permission of instructor. 6 credits, SS; SI, IS, Spring-M. Sehgal
113. Anthropology of Gender This course examines gender and gender relations from an anthropological perspective. We discuss such key concepts as gender, voice/mutedness, status, public and private spheres, and the gendered division of labor, and explore the intellectual history of these terms and how they have been used. The course focuses on two areas: 1) the role of sex, sexuality, and procreation in creating cultural notions of gender, and 2) the impacts of colonialism, globalization, and economic underdevelopment on Third World women. Readings include both theoretical articles and ethnographic case studies from around the world. Prerequisite: Sociology and Anthropology 110 or 111 or permission of the instructor. 6 credits, SS, WR, RAD; SI, WR2, IS, Not offered in 2010-2011
114. Demography of the Family This course uses demographic techniques to study the family and changes in family behaviors and household relationships. Drawing primarily, but not exclusively, upon the demographic literature, families are studied across time, social groups, and countries. The course will review trends in family composition and structures and introduce theoretical perspectives on union formation and family change. Possible topics for study include cohabitation and marriage, teenage pregnancy, child care, and intergenerational relationships. The course will examine the role that public policies have played in shaping families to date and what effects public policies might have on the American family in the future. Prerequisite: Sociology and Anthropology 110 or 111.6 credits, $S S, W R$; SI, WR2, IS, QRE, Fall-P. Brandon
115. Human Evolution and Prehistory A survey of the course of human evolution from

Australopithecenes to the Upper Paleolithic. Areas of discussion include paleoanthropology, genetics, primate ethology, the role of archaeology in providing evidence for human evolution and culture, and the importance of environment and technology in the evolution of culture. No prerequisite. 6 credits, SS ; NE, Not offered in 2010-2011
231. Transnational Migration and Diasporic Communities An interdisciplinary approach to the study of transnational migration and global diasporas. Instructor introduces theoretical perspectives on contemporary migration, transnational linkages, and imaginative connections maintained by globally dispersed peoples. Instructor and guest experts present model case studies. Students research and present additional case studies. 6 credits, SS, RAD; SI, IS, Not offered in 2010-2011
233. Life Work of an Anthropologist: Marshall Sahlins Through consideration of his or her publications and professional activities, this course explores contributions to the discipline and beyond by a major figure in the field of anthropology. This is primarily a reading and discussion, seminar-style course. This year's iteration of the course will explore the life work of Marshall Sahlins, Chesley lecturer for 2011. 3 credits, SS; SI, Spring-V. Dusenbery
234. Ecology, Economy, and Culture This course examines the ways in which economic goods are embedded in social relations. When does a thing become a commodity? What relationships exist between culture and ecology? Formulating an anthropological perspective for the interpretation of "economic facts," we will examine simularities and differences among hunter-gatherers, horticulturalists, and peasants. We will also discuss the interpretation of traders in the brokering of culture, asymmetrical articulation of local and transnational economies, gender bias in classical
exchange theory, Mauss on gift-giving and Marx on "commodity fetishism." Theoretical material will be illustrated with ethnographic examples from Africa, Asia, Oceania, and the Americas. 6 credits, SS; SI, IS, Winter-J. Levi
236. Introduction to Peace Studies Peace studies is an evolving and emerging holistic interdisciplinary study of collective harmony and collective violence. In this course we will study the alternative definitions of peace and examine the relation between peace and a variety of societal factors including modernity, post modernity, international anarchy, forms of state, cultural construction of violence, religious prejudice, patriarchy, nuclear weapon, ecology, militarism, globalization and a global civil society and culture. 6 credits, SS; SI, IS, Spring-N. Saidei
239. Explorations in Social Data Analysis The course introduces social science students to basic statistical tools for social data analysis. The course covers the foundations of univariate and inferential statistics up to simple regression. The course focuses much more on applications of statistical techniques to social science questions and data, rather than statistical theory. 6 credits, $S S ; F S R, Q R E$, Not offered in 2010-2011
240. Methods of Social Research The course is concerned with social scientific inquiry and explanation, particularly with reference to sociology and anthropology. Topics covered include research design, data collection, and analysis of data. Both quantitative and qualitative methods are considered. Student will demonstrate their knowledge by developing a research proposal that is implementable. Prerequisite: Sociology and Anthropology 110 or 111; Sociology and Anthropology 239 or Mathematics 115 or Mathematics 215.6 credits, SS; SI, QRE, Spring-P. Brandon
241. Guatemala Program: Mesoamerican Cultures Mesoamerica, a major area of pre-Columbian civilization, is a region generally extending from around the Tropic of Cancer in Mexico to northwestern Costa Rica. This course will examine both ancient and modern peoples of Mesoamerica, with special reference to the Maya peoples of Guatemala and southern Mexico. Students will cover topics including economic, social, political, and religious organization as well as cosmology and symbolism. Course materials should assist students in selecting a topic for their individual research projects. 6 credits, SS ; SI, IS, Not offered in 2010-2011
242. Qualitative Methods In this course we examine the epistemological assumptions and techniques of qualitative research. We begin by examining questions such as: How do we know what we know? What questions guide our research? Does it matter who the researcher is? What do we do to the objects/subjects of our research? What issues arise in studying 'Others'? Whose interests does research serve? Who uses or misuses it? Can qualitative research address social justice issues? These discussions are followed by hands-on practical experience thinking and researching from a qualitative perspective. This course is useful to students applying for junior fellowships, study abroad programs, or planning to use a qualitative approach in their comps. Prerequisites: Sociology and Anthropology 110 or 111 or permission of instructor. 6 credits, SS, WR; SI, WR2, IS, Offered in alternate years, Not offered in 20102011
243. Social Research Practicum This course builds on the skills of Sociology and Anthropology 240 which introduces students to qualitative and quantitative methodologies for examining hypotheses about the social world. Students will select a compelling social issue and design and conduct a complete research study. This research practicum will provide a solid foundation for students' subsequent integrative exercise in Sociology and Anthropology 400. 6 credits, SS; SI, Not offered in 2010-2011
250. Ethnography of Latin America This course explores the historical development and contemporary experience of selected peoples and cultures of Latin America. We will examine the historical and structural processes that have shaped contact among indigenous, European, and African peoples in Latin America during Conquest and the colonial period, under conditions of global economic expansion and state formation, and in present day urban centers and extractive "frontiers." Special
attention will be given to local-level transformations and resistance as well as issues of migration and gender construction. 6 credits, SS, RAD; SI, IS, Not offered in 2010-2011
251. Guatemala Prog: Resource Mgmt, Community Develpmnt \& Soc Change in Guatemala \& Chiapas This course explores contemporary strategies for survival in Maya lands in the face of the global economy by examining how community groups, entrepreneurs, peasant organizations, niche markets, social movements, government and non-governmental organizations play important roles in promoting economic betterment, social justice, locally based decision making, and more equitable, environmentally sound, sustainable development. Through readings, lectures, interviews, and direct community engagement with human rights activists, conservation experts, development practitioners, and both farmers and foragers in the Maya tropical forest, students will learn about the complex interplay between cultural ecology, resource management and community revitalization. 4 credits, $S S$, RAD; SI, IS, Not offered in 2010-2011
256. Ethnography of Africa This course emphasizes the study of several sub-Saharan African societies so as to deal with themes that have concerned anthropologists working in Africa. The types of questions anthropologists have posed about African societies, and the role Africa has played in the development of anthropological theory is explored. Texts include three classics, The Nuer, Chisungu, and Witchcraft, Oracles and Magic as well as contemporary re-studies and ethnographic case studies by both African and Western scholars to address issues affecting the entire continent, including colonialism, gender, AIDS, local-state relations, the role of history, and debates about cultural identities. Prerequisite: Sociology and Anthropology 110 or 111 or permission of the instructor. 6 credits, $S S, W R, R A D ; S I$, WR2, IS, Not offered in 2010-2011
257. Culture and Politics in India India is a region of immense diversity where more than one billion people live. This course will explore social structures in India--through a focus on key areas of everyday life such as family, religion, economy, systems of stratification and social movements. Close attention will be given to religious nationalism, globalization and militarism as dominant trends affecting contemporary India. Questions we will consider include: How has India been represented in the Western imagination and why do such representations matter? What are the forces of modernity and tradition in India? What are the similarities and differences in systems of stratification in India and the United States? Prerequisites: Sociology and Anthropology 110 and 111 or permission of the instructor. 6 credits, SS, WR, RAD; SI, WR2, IS, Not offered in 2010-2011
259. Comparative Issues in Native North America This course examines the cultural and historical situation of indigenous groups in the United States, Mexico, and Canada to develop a comparative perspective for understanding native peoples in North America. How have indigenous peoples variously coped with continuity and change? What strategies have they employed in pursuit of political sovereignty, economic survival, and cultural vitality? In answering these questions, we will explore the politics of representation regarding "the Indian" as a symbol in national consciousness; the negotiation of identity in inter-ethnic contexts; patterns of resistance; the impact of European powers and state agendas; and the resurgence of tradition. 6 credits, SS; SI, IDS, Spring-J. Levi
260. Myth, Ritual, and Symbolism Exploring the ways in which people make sense of their world through myth, ritual and symbolism, this course takes an anthropological approach to the study of comparative religion. What is the relationship between "myth" and "history?" How do animals, food, color, music, and the human body function as idioms of symbolic communication? Why is ritual credited with the ability to heal illnesses, offer political commentary, maintain cosmic harmony, and foster social cohesion through the exhibition of interpersonal tensions? Examining major theories in the anthropology of religion, students learn to record and analyze both "familiar" and "unfamiliar" myths, rituals, and symbols. 6 credits, SS; SI, IS, Fall—J. Levi
261. Imagining Indonesia: Pluralism and Unity Given its great cultural and linguistic diversity, its
religious pluralism, and the dramatic political changes it has recently undergone, the Republic of Indonesia provides an opportunity to explore questions crucial to understanding human society and culture. How do people make collective sense of their experiences in a changing world? How do citizens negotiate membership in a nation-state with belonging to local ethnolinguistic groups? How are modernity and tradition interpreted and combined? How do world religions (i.e., Islam, Christianity, Hinduism, Buddhism) interact with local beliefs and practices? We take an anthropological perspective using various genres and resources, both written and visual. 6 credits, $S S, W R, R A D ; S I, W R 1, I S$, Winter-E. Coville
262. Anthropology of Health and Illness An ethnographic approach to beliefs and practices regarding health and illness in numerous societies worldwide. This course examines patients, practitioners, and the social networks and contexts through which therapies are managed to better understand medical systems as well as the significance of the anthropological study of misfortune. Specific topics include the symbolism of models of illness, the ritual management of misfortune and of life crisis events, the political economy of health, therapy management, medical pluralism, and cross-cultural medical ethics. Prerequisite: Sociology and Anthropology 110 or 111 or permission of the instructor. 6 credits, $S S, W R$; SI, WR2, IS, Not offered in 2010-2011
266. Urban Sociology In this course, we will explore ideas about cities and humans who live there through a series of lenses including: city as place, city as symbol, city as location of assimilation and integration and the opposite, city as a site of segregation and extremes of power and capital. How do cities work and for whom? By combing theoretical readings with case studies, we will move from historical ethnographies of cities and communities, to current studies of cities in global context. Prerequisites: Sociology and Anthropology 110 or 111 or consent of instructor. 6 credits, SS; SI, IDS, Not offered in 2010-2011
272. Ethnicity and Race This course examines ethnic and racial relations from an anthropological perspective. We focus on such theories as primordialism, instrumentalism, myth-complex, and boundaries, exploring the intellectual history of these theories. Readings include both theoretical articles and ethnographic case studies from around the world. 6 credits, SS, RAD; SI, IS, Not offered in 20102011
274. Language, Culture and Society With an emphasis on the linking of language, culture, and social context, this course introduces linguistic anthropology. We begin by looking at its roots in linguistics, anthropology, semiology and semiotics. Then we introduce the central concepts of speech community, communicative competence, and language functions. We explore both classic studies (e.g., terms of address; linguistic relativity; language variation) and contemporary research (e.g., ritual performance; political economy of language; language socialization; social contexts of literacy; language ideologies; language endangerment). We will read ethnographic material from the United States (e.g., Hmong, Apache) and the world (e.g., Indonesia, Africa). Students will also do field observations of language practice in their own communities. 6 credits, SS, RAD; SI, IS, Fall-E. Coville

## 275. Comparative Welfare Systems and Social Safety Nets in Australia Program: Community

 Needs Assessment This course introduces students to different approaches to assessing a community's needs and to social program evaluation. The first half of the term will focus on the four basic methods for discovering and prioritizing community needs. The second half of the term will concentrate on four leading techniques for evaluation social programs. Students will draw upon their internships and knowledge gained from the class to either: (a) submit a thorough literature review and critique of the evaluation studies conducted on a specific Australian social program; or, (b) present a report arguing for a community needs assessment in a local town in the Australian Capital Territory, or for the city of Canberra, or for one of its suburbs. Prerequisite: Sociology/Anthropology 110 and Mathematics 115 or 215.6 credits, SS, FSR, IS, QRE, Winter-P. Brandon276. Comparative Welfare Systems and Social Safety Nets in Australia Program: Comparative Welfare Systems This course will focus on the forces affecting the development of national welfare systems seeking to reduce poverty, redistribute income, redress inequalities and promote equal opportunities. Across many advanced industrial nations internal social forces and globalization are transforming these countries' welfare regimes. In this course, we examine three case studies exemplifying the phenomena: the United States, Australia, and New Zealand. We will compare and contrast each country's welfare policies for single mothers, indigenous groups, immigrants, and the disabled. By examining each country's welfare policies for these vulnerable populations, much is learned about welfare systems in advanced industrial nations and factors that can make a country's welfare system distinctly different or surprisingly similar to another. Prerequisite: Sociology/Anthropology 110 and Mathematics 115 or 215.6 credits, SS, WR; SI, WR2, IS, Winter-P. Brandon
277. Statistical Tools for Quantitative Reasoning This course aims to produce numerate students who can write confidently and effectively about the social world they have explored using survey data and have assessed using statistical tools. The course provides students with statistical tools to evaluate and analyze survey data and opportunities to write critically and cogently about the empirical relationships they have discovered. Numerous statistical methods are taught, but contrasting more traditional advanced statistics courses, the emphases are using survey data to drive learning multivariate statistics, and requiring intensive writing exercises about empirical discoveries to motivate student understanding about the social world and complex statistical concepts. Students should have basic knowledge of the statistical program STATA. Prerequisite: Mathematics 115 or 215 or with permission of instructor. 6 credits, SS, WR; FSR, WR2, QRE, Not offered in 2010-2011
278. Anthropology of China This course examines China from an anthropological and sociological perspective. Readings include both theoretical articles and ethnographic case studies; readings from other disciplines are also supplementary. We deal with both Han and non-Han peoples. Students are expected to gain a holistic understanding of China with regards to its changes of politico-symbolic boundaries, its power relations, and its connection to globalization. We will also talk about "translingual practice" as represented by symbolic negotiations between the traditional, changing Chinese view and the views that come from outside. Prerequisites: Sociology and Anthropology 110 or 111 or permission of instructor. 6 credits, SS; SI, IS, Not offered in 2010-2011
279. The Ethics of Civic Engagement In this course, students will discuss the ethical questions that arise when they engage with others in research, service, organizing, or policy work. Students will read and talk about the meanings and forms of civic engagement and use these readings to reflect upon their own research or service projects, or to reflect upon the college's role in Haiti or Faribault, two areas where college members are actively engaged. Gaining insights from sociological and practice based readings, we will examine different perspectives on the ways that power and privilege relate to civic engagement. 3 credits, S/CR/NC, SS; SI, Winter, Spring-A. Falcón, C. Fure-Slocum
280. Anthropology of East Asia This course examines East Asian cultures and societies from an anthropological perspective. China, Mongolia, Japan and Korea are linked historically, culturally, and linguistically; each part of this "cultural complex" shares common features with the other while maintaining distinct traits. This class explores an historical Chinese script-culture sphere, including Japanese, Korean, and many other groups. We examine the superpower geopolitics that forced the opening up of China and Japan and is thus vital for understanding East Asian history, culture and society. Readings include both theoretical articles and ethnographic case studies from the region. 6 credits, SS; SI, IS, Not offered in 2010-2011
281. Comparative Welfare Systems and Social Safety Nets in Australia Program: Directed Reading For this course students will use multimedia resources to learn about Australia's history, culture, governance, and economy. Films, poetry, novels, and academic works will offer students
insights into Australia and its indigenous and non-indigenous peoples. Students will be tested on the materials at the beginning of the term at ANU. 2 credits, $S / C R / N C, N D ; N E$, Winter- P. Brandon
282. Guatemala Program: Field Methods and Individual Research Project The first part of the course is designed to prepare students for their individual field research projects. Students will cover participant observation, interview methods, research ethics, and develop a prospectus for their field research. In the second part of the course, students will apply their knowledge of field methods and conduct four weeks of ethnographic research in a highland Maya community in western Guatemala based on their prospectus, followed by a one week period in Quetzaltenango during which students will write their research papers and present their findings in a research symposium. 6 credits, ND; SI, IS, Not offered in 2010-2011
283. Anthropology and Indigenous Rights This seminar examines the relationship between culture and human rights from an anthropological perspective. By asking "who are indigenous peoples?" and "what specific rights do they have?" this course introduces students to a comparative framework for understanding cultural rights discourse. Given the history of intolerance to difference, the seminar demonstrates the need to explore the determinants of violence, ethnocide, and exploitation routinely committed against the world's most marginalized peoples. At the same time, it also asks about the limits of tolerance, if human rights abuses are perpetrated under the banner of cultural pluralism. Students will analyze case studies drawn from Africa, Asia, and the Americas, as well as issues that cross-cut these regions. Prerequisite: Sociology and Anthropology 110, 111 or permision of the instructor; upper division coursework in anthropology, sociology, history or philosophy recommended. 6 credits, SS; SI, IS, Not offered in 2010-2011
284. Environmentalism and Social Change Through readings, discussions, films, and a service learning project, students in this class will be using environmentalism to learn about the framing of social problems, the historical evolution of a social change effort, as well as the sociology of organizations, the sociology of social movements and the sociology of civic engagement. By looking at the diverse forms and levels of engagement--by individuals, organizations, and social movements--we will seek to understand which kinds of initiatives bring about what kinds of changes and to understand future challenges for environmental efforts in the United States. There will be a service learning component with a local environmental group or organization so as to provide a local context and an experiential perspective on the class topics. 6 credits, SS; SI, Not offered in 2010-2011
285. Working Across the Life Course This course explores the meaning, experiences, and challenges of work at four stages: adolescence, young adulthood, mid-life, and the senior years. At each stage we examine key questions that sociologists who study work and occupations ask. For example, how does paid employment in the teenage years affect schoolwork and adolescent well-being? Do the occupational aspirations of today's college students match up with the job structure of the contemporary labor market? What types of challenges arise in balancing work and family? We develop answers to these questions by reading sociological theory and research, and by analyzing data. The course will also have an experiential component. Prerequisites: Mathematics 115 or 215 or Sociology and Anthropology 240. 6 credits, SS, WR; SI, WR2, QRE, Not offered in 2010-2011
286. Anthropology and/of Globalization Late twentieth century-early twenty-first century globalization--speeding up and intensifying transnational flows of people, goods, capital, ideas, and images--has challenged modernist thinking about our social world. This course explores both the challenges that globalization has posed to mainstream anthropological thought and theory and the ways that anthropologists have contributed to the interdisciplinary study of globalization as a social process. Prerequisite: Sociology and Anthropology 110 or permission of the instructor. 6 credits, SS; SI, IS, Fall-V. Dusenbery
287. Sociological Thought and Theory Classical sociological theory has been concerned with at least
three fundamental questions. They are the nature of the historic transition from feudalism to capitalism, the appropriate method of social studies, and the form of a rational society. Beginning with the Enlightenment and romanticism, we study nineteenth century positivism, liberalism, Marxism and nihilism, and investigate the ideas of Weber and Durkheim at the turn of the century. Prerequisite: Sociology and Anthropology 111 or permission of the instructor. 6 credits, SS; SI, Fall—N. Saiedi
288. Anthropological Thought and Theory A systematic introduction to the theoretical foundations of social and cultural anthropology with special emphasis given to twentieth century British, French and American schools. The course deals with such seminal figures as Morgan, Boas, Malinowski, RadcliffeBrown, Levi-Straus, Harris, Sahlins, Bourdieu, Geertz, and Appadurai. The reading strikes a balance between ethnographic accounts and theoretical statements. Prerequisites: Sociology and Anthropology 110 and 330 or permission of the instructor. 6 credits, SS, RAD; SI, IS, Winter-V. Dusenbery
289. Contemporary Social Theory A basic overview of the major debates in contemporary sociological theory, from 1920s to the present. Unlike the classical sociological theory in which both grand models and substantive theories are addressed by the same writer, there is a division of labor in the contemporary social theory. Thus some theorists emphasize the foundational grand categories (like Lukacs, Habermas, Sombart, Marcuse, Mead, Foucault, Wallerstein, Gadamer, Sorokin, Parsons, Lyotard and others), whereas others have contributed substantive ideas to a a specific field (Moore, Skocpol, Wright, Collins, Manheim, Olson, Smith, Kohn, Bernstein, Bell and others). We will explore both directions of contemporary social theory. 6 credits, SS; SI, Spring—N. Saiedi

## 393. Comparative Welfare Systems and Social Safety Nets in Australia Program: Policy

 Internship Students are expected to assist an agency or organization for seven hours once per week, for 10 weeks. Students are expected to integrate the internship experience into other seminar course work. At the end of the term, a report of their integrated experiences will be required. Placements will span government and non-governmental sectors and reflect some aspect of Australian life, e.g., health, education, social welfare, indigenous affairs, migration, or climate change and the environment. 4 credits, $S / C R / N C$, $N D$; $N E$, Winter- $\boldsymbol{P}$. Brandon395. Ethnography of Reproduction This seminar explores the meanings of reproductive beliefs and practices in comparative perspective. Using ethnographies, it explores the relation between human and social reproduction. It focuses on (but is not limited to) ethnographic examples from the United States/Canada and from sub-Saharan Africa (societies with relatively low fertility and high utilization of technology and societies with mostly high fertility and low utilization of technology). Topics examined include fertility and birth, fertility rites, new reproductive technologies, abortion, population control, infertility, child survival and child loss. Prerequisites: Sociology and Anthropology 110 or 111; and 226, 260, or 262; or permission of the instructor. 6 credits, SS, WR; SI, WR2, IS, Not offered in 2010-2011
396. Public Sociology Debate about the field of public sociology has been growing rapidly since Michael Buravoy's 2004 challenge to fellow sociologists to engage in public sociology. This course will analyze that debate and locate it historically in sociological texts with a main focus on the current debate. In addition, this will be an applied course where students will engage in community projects, such as conducting an assessment of the needs for community based research in Northfield, in order to develop research skills and gain data for reflection and analysis. Recommended for upper level students who have taken their methods courses. Prerequisites: Sociology and Anthropology 111 and 240 or equivalent. 6 credits, SS; SI, IDS, Not offered in 2010-2011
397. Integrative Exercise The integrative exercise in Sociology and Anthropology consists of two options. The thesis option involves carrying out and presenting a major piece of research, as well as sharing and discussing the work-in-progress with a group of others engaged in the same process, under the guidance of a faculty supervisor. The exam option consists of a four-part comprehensive exam on sociological theory, anthropological theory, social research methods, and a topical specialization. Study
groups work together in fall and winter for the spring term exam. Please consult the
Sociology/Anthropology website for a full description. 6 credits, $S / N C$, ND; NE, Fall, Winter, SpringStaff

## Other Courses Pertinent to Sociology/Anthropology:

ARCN 246 Archaeological Methodology
ARCN 395 Archaeology Capstone Seminar (Not offered in 2010-2011)
CCST 210 Global/Local Perspectives
ENTS 244 Conservation and Development in Tanzania: Biodiversity Conservation and Development MELA 242 Ethnographies of Turkey

## SOUTH ASIAN STUDIES CONCENTRATION

## Director: Assistant Professor Meera Sehgal

South Asia, which contains nearly a quarter of the world's people, refers to the countries comprising the South Asian subcontinent: Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka, Maldives, and sometimes Afghanistan and Tibet. The concentration consists of a program of study combining language training, off-campus study, required core courses in various disciplines, and supporting courses, including a designated capstone course. The purpose of the concentration is to provide cross-cultural interdisciplinary understanding of a complex civilization that is both ancient and modern, and of great significance in the contemporary world.

## Requirements for the Concentration:

A total of 42 credits, with at least 6 credits drawn from each of the three ASST distribution areas (Arts and Literature, Humanities, Social Sciences)

18 credits in core courses, drawn from at least two of the three ASST distribution areas
24 credits from supporting courses, drawn from at least two of the three ASST distribution areas, and including a designated South Asia-related capstone course

Courses taken on off-campus programs in South Asia may be applied to the concentration
Normally, at least one term of off-campus study in South Asia
The closest equivalent to one year of study of a South Asian language, obtained through one or more of the following: off-campus study; summer programs at colleges, universities, or institutes; independent study at Carleton

Core Courses: 18 credits from among the following; courses must be from at least two distribution areas

ENGL 250: Modern India Fiction
ENGL 251: Contemporary Indian Fiction
HIST 167: Survey of Modern South Asia
HIST 266: History of Islam in India
MUSC 248: Music of India (Not offered in 2010-2011)
RELG 150: Religions of South Asia
SOAN 157 Cultures and Politics in India
SOAN 257 Cultures and Politics in India
Supporting Courses: 24 credits from among the following: courses must be from at least two distribution areas.

ECON 240 Microeconomics of Development
ENGL 245 Bollywood Nation

ENGL 335 (Post)Colonialism and Identity
HIST 259 Women in South Asia: Histories, Narratives and Representation (Not offered in 20102011)

HIST 262 Post-colonial South Asia, 1947-present
MUSC 180 or 280 Raga: Vocal or Instrumental Study of Hindustani Music
RELG 122 Introduction to Islam
RELG 250 Hindu Traditions
RELG 251 Theravada Buddhism (Not offered in 2010-2011)
RELG 253 Tibetan Buddhism
RELG 256 Chinese Ways of Thinking
RELG 257 Buddha (Not offered in 2010-2011)
RELG 258 Women in Buddhism (Not offered in 2010-2011)
RELG 268 Encountering Islam
RELG 350 Emptiness
Capstone Course: For 2010-2011, the designated capstone course is:
HIST 266 History of Islam in India

## SPANISH (SPAN)

Chairs: Associate Professor Silvia L. López
Professors: Becky J. Boling, José Cerna-Bazán, Humberto R. Huergo
Associate Professors: Jorge Brioso, Silvia L. López
Assistant Professor: Maria Del Palmar Álvarez-Blanco, Yansi Perez
Senior Lecturers: María Elena Doleman, Diane Pearsall
Lecturer: Linda Demarest Burdell
Visiting Instructor: Beatriz Periente-Beltrán

## Language Courses

Language courses $101,102,103,204$ are a sequential series of courses designed to prepare the student in the basic language skills (listening, speaking, reading, and writing) through the study of grammar, literature, and culture, and/or to provide the foundation for pursuing advanced work in language and literature. Spanish 205, 206 and 207 are designed to develop the student's spoken and written mastery of the language through compositions and intensive oral work based on cultural and literary topics. Admission to these courses is determined either by appropriate high school CEEB or Carleton placement test scores or by completion of the previous course in the sequence with a grade of C- or better.

## Literature Courses

We examine literary works for both their aesthetic and human values. Our literature courses have a number of goals: to refine and expand students' linguistic ability, to broaden their cultural understanding, to improve their ability to engage in literary analysis, to enhance their knowledge of literary history and criticism, and to help students better understand themselves and the human condition. In our discussions, we address universal themes and concerns, but we also try to uncover what is peculiarly Hispanic or Latin American about the works.

## Requirements for a Major

Sixty-six credits in Spanish including either 205 or 206 and no more than twelve credits in the 205-210 sequence. Courses 101, 102, 103, 204 do not count toward the major. Students may not apply more than 18 credits from courses numbered 220-290 to the major. In addition to 66 credits in the major,
six credits are required in literature outside the major. Majors must complete at least three courses in Latin American literature and three courses in Peninsular literature (Spain) before winter term of the senior year. Students also write an integrative exercise during senior year.

Concentration: See separate section for Latin American Studies Concentration.
Programs Abroad: Participation in a Carleton or in another approved foreign study program is highly recommended for students majoring or concentrating in the above areas. Students interested in study abroad should consult the section on international off-campus programs, and discuss alternatives with faculty in Spanish and with the Director of Off-Campus Studies.

Language Houses: Students have the opportunity to immerse themselves in the language by living in the Language House. The Associate is a native speaker, and students organize and participate in numerous cultural activities in the language houses.

Certificate of Advanced Study in Foreign Language and Literature: In order to receive the Certificate of Advanced Study in Spanish, students must fulfill the general requirements (refer to Academic Regulations) in the following course distribution: six courses completed with a grade of C- or better in Spanish beyond 103, including at least two upper-level literature courses (300-395). Although courses for the certificate may be taken on a S/CR/NC basis, "D" or "Cr" level work will not be sufficient to satisfy course requirements. No more than 12 credits from non-Carleton off-campus studies programs may be applied toward the certificate.

## Spanish Courses

101. Elementary Spanish This course introduces the basic structures of the Spanish language, everyday vocabulary and cultural situations. Students practice all four skills (reading, writing, listening and speaking) in Spanish. Taught five days a week in Spanish. Prerequisite: none (Placement score for students with previous experience in Spanish). 6 credits, ND; NE, Fall—Staff
102. Elementary Spanish This course introduces complex sentences and various tenses and short literary and cultural texts. Students practice all four skills (reading, writing, listening and speaking) in Spanish. Taught five days a week in Spanish. Prerequisite: Spanish 101 or placement score. 6 credits, ND; NE, Winter-Staff
103. Intermediate Spanish This course continues the study of complex sentence patterns and reviews basic patterns in greater depth, partly through the discussion of authentic short stories. Students practice all four skills (reading, writing, listening and speaking) in Spanish. Taught five days a week in Spanish. Prerequisite: Spanish 102 or placement score. 6 credits, ND; NE, Spring—Staff
104. Intermediate Spanish Through discussion of literary and cultural texts and films, as well as a review of grammar, this course aims to help students acquire greater skill and confidence in both oral and written expression. Taught three days a week in Spanish. Some Spanish 204 sections include a service-learning component, to enrich students' understanding of course material by integrating academic study with public service. The language classes team up with the Northfield public schools to help both Northfield and Carleton students improve their language skills. Prerequisite: Spanish 103 or placement score. 6 credits, ND; NE, Fall, Winter, Spring—Staff
105. Conversation and Composition A course designed to develop the student's oral and written mastery of Spanish. Advanced study of grammar. Compositions and conversations based on cultural and literary topics. There is also an audio-video component focused on current affairs. Prerequisite: Spanish 204 or proficiency. 6 credits, ND; LA, IS, Fall, Winter, Spring-J. Brioso, H. Huergo
106. Mexico Program: Grammar and Conversation Together with a review of key grammar topics of previous language classes, this course takes advantage of on-site resources to further develop communicative skills in Spanish. The strong emphasis on students' projects and presentations, as well as interactions with the native setting are geared toward a greater fluency in oral Spanish. This class is
especially oriented to students who have completed Spanish 204. Prerequisite: Spanish 204. 6 credits, ND; LA, IS, Not offered in 2010-2011
107. Exploring Hispanic Culture Designed for the person who wants to develop greater fluency in speaking, writing, and reading Spanish in the context of a broad introduction to Hispanic culture. Short stories, plays, poems, films, and short novels are read with the goal of enhancing awareness of Hispanic diversity and stimulating classroom discussion. Prerequisite: Spanish 204 or proficiency. 6 credits, $N D$, RAD; LA, IS, Not offered in 2010-2011
108. Coffee and News An excellent opportunity to brush up your Spanish while learning about current issues in Spain and Latin America. The class meets only once a week for an hour. Class requirements include reading specific sections of Spain's leading newspaper, El Paí-s, everyday on the internet (El Paí-s), and then meeting once a week to exchange ideas over coffee with a small group of students like yourself. Prerequisite: Spanish 204 or proficiency. 2 credits, $S / C R / N C, N D$; LA, IS, Fall, Winter, Spring—J. Brioso
109. Spanish Seminar in Madrid: Current News This course is a discussion of current events affecting Spain as reflected in the daily press. 6 credits, ND; LA, IS, Fall-H. Huergo
110. Mexico Program: Grammar and Writing While expanding communicative skills, this class focuses on compound sentence grammar and structures beyond the sentence level, and includes an intensive practice of different registers and varieties of writing in Spanish. Written work and in-class discussion focus on relevant aspects of Mexican and Latin American social reality. This class is especially oriented to students who have already completed Spanish 205. Prerequisite: Spanish 204. 6 credits, AL; LA, IS, Not offered in 2010-2011
111. Magical Realism in Latin American Narrative Is it real? A concern with the interplay between reality and fiction rests at the heart of Magical Realism--a mode of discourse and a perspective on the problem of representation that informs a good many of the best known works in Latin American literature. This course will examine works in translation by authors such as Alejo Carpentier, Gabriel García Márquez, Julio Cortázar, Isabel Allende, Laura Esquivel. We'll close the course with a nod to those authors who reject Magical Realism as the primary mode of fiction in Latin American prose. In translation. No prerequisities. 6 credits, AL, RAD; LA, IS, Fall-B. Boling
112. Images of the Indian in Spanish American Literature After a historical survey of the relationship between national projects of social organization and the indigenous populations of the area, this course focuses on Indigenismo as a set of social discourses attempting to represent "the Indian," and on key works by Icaza (Ecuador), Asturias (Guatemala), Arguedas (Peru), and Castellanos (Mexico). While considering the specific literary quality of this writing, we will contrast its representation of "the Indian," with indigenous self-representation in oral-popular tradition and through intellectuals like Domitila Barrios, Rigoberta Menchú, Bernabe Condori and others, to better understand the relationship between official culture and its Other. Prerequisite: Spanish 204 or proficiency. 6 credits, $A L ; L A, I S$, Not offered in 2010-2011
113. Introduction to Spanish Literature This course will examine the uniqueness of Spanish literature from the Middle Ages to the present. What is unique about Spanish literature? The meeting of Arabs, Christians, and Jews; the discovery of the Indies as told by Christopher Columbus; the enormous cultural and ethnic complexity of the conquest of the New World; the creation of the modern novel in the Lazarillo and its destruction in Cervante's Don Quixote; the mystic eroticism of St. Therese and St. John of the Cross; the ruminative poetry of Antonio Machado and the mythical poetry of Lorca. Prerequisite: Spanish 204 or proficiency. 6 credits, AL; LA, IS, Not offered in 2010-2011—J. Brioso
114. Introduction to Latin American Literature An introductory course to reading major texts in Spanish provides an historical survey of the literary movements within Latin American literature from
the pre-Hispanic to the contemporary period. Recommended as a foundation course for further study. Not open to seniors. Prerequisite: Spanish 204 or proficiency. 6 credits, $A L, R A D$; LA, IS, Winter-S. López
115. Latin American Theater in Translation: Nation, Power, Gender Introduction to key themes and modes of production in twentieth century theater in Latin America. We will read representative plays from established playwrights such as Rodolfo Usigli, Griselda Gambaro, Manuel Puig, Sabina Berman, Mario Vargas Llosa, Mario Benedetti, Ariel Dorfman, Susana Torres Molina among others. The course will be organized around themes of national and cultural identity, relations of power, and the (de)construction of gender. Students will be asked to put on scenes and develop areas of research. Prerequisite: Spanish 204 or proficiency. 6 credits, AL; LA, IS, Not offered in 2010-2011
116. Spain Today: Recent Changes through Narrative and Film Since the death of Franco in 1975, Spain has undergone huge political, socio-economic, and cultural transformations. Changes in the traditional roles of women, the legalization of gay marriage, the decline of the Catholic church, the increase of immigrants, Catalan and Basque nationalisms, and the integration of Spain in the European Union, have all challenged the definition of a national identity. Through contemporary narrative and film, this course will examine some of these changes and how they contribute to the creation of what we call Spain today. Prerequisite: Spanish 204 or proficiency. 6 credits, $A L, R A D ; L A, I S$, Spring- $\boldsymbol{P}$.

## Álvarez-Blanco

247. Spanish Seminar in Madrid: Spanish Art from El Greco to Picasso This course is a survey of Spanish art from the sixteenth to the twentieth centuries. Classes will meet at some of the finest museums in Madrid, including the Prado Museum and the Museo Nacional Centro de Arte Reina Sofia (Museum of Modern Art). Art lectures will be supplemented by field trips to Toledo, Barcelona, Cordoba, and Seville. Prerequisite: Spanish 204 or proficiency. 4 credits, AL; LA, IS, Fall—NonCarleton Faculty
248. Spanish Cinema This course will study Spanish film from 1950s to the present. Through the study of the social and political processes involved in the conception of time and memory we will discuss the work of internationally recognized filmmakers such as Luis Buñuel, Luis García Berlanga, Mario Camus, Carlos Saura, Victor Erice and Pedro Almodóvar. Extra time. Prerequisites: Spanish 204 or proficiency. 6 credits, AL; LA, IS, Not offered in 2010-2011
249. Love Stories in Latin American Prose From soap operas (culebrones) and popular romance novels (la novela rosa) to stories written by Gabriel García Márquez and Laura Esquivel, love stories never seem to lose their appeal. In this course we will read a popular Spanish romance novel by Corín Tellado, watch a Latin American soap opera, and read and discuss variations on the basic novela rosa by Latin American authors. Among possible authors studied are Gabriel García Márquez, Laura Esquivel, Daína Chaviano, Zoé Valdés, Manuel Puig, Isabel Allende, Gioconda Belli, Mayra Montero. Prerequisite: Spanish 204 or proficiency. 6 credits, AL, RAD; LA, IS, Not offered in 2010-2011
250. Women Dramatists in Latin America: Staging Conflicts This course examines contemporary plays written by Latin American women from a gendered perspective. Issues range from women and political repression to a critique of gender roles. As we read the plays, we will consider both the literary qualities of dramatic texts and the semiotics of staging and its potential for reconceptualizing women's roles in Latin American society and culture. Possible dramatists are Luisa Josefina Hernández, Rosario Castellanos, Griselda Gambaro, Elena Garro, Sabina Berman, Susana Torres Molina, Marcela del Río. Prerequisite: Spanish 204 or proficiency. 6 credits, AL, RAD; LA, IS, Not offered in 2010-2011
251. Lorca, Buñuel, and Dalí: Poetry, Film, and Painting in Spain Lorca, Buñuel, and Dalí attended the same college in Madrid. It was the 1920s and the young were truly young and almost everything was possible. Soon Lorca became Dalí's secret lover and muse, inspiring many of his early paintings and launching his career in the artistic circles of Barcelona and Madrid. At the same time, Dalí collaborated
with Buñuel in two landmarks of experimental cinema--The Andalusian Dog and The Golden Age. This course examines the friendship between the three artists and their place in the history of twentiethcentury art, film, and literature. Extra time. Prerequisite: Spanish 205 or proficiency. 6 credits, $A L ; L A$, IS, Not offered in 2010-2011
252. Mexico Program: Images of Mexico in Literature and Popular Culture Readings and discussion in this course focus on the cultural construction of "lo mexicano" (Mexicanness). Particular attention is paid to some cultural aspects of the Puebla-Veracruz area, and the human experiences and the ideological issues arising from the Mexico-United States cross-border situation. Prerequisite: Spanish 204 or proficiency. 6 credits, AL; LA, IS, Not offered in 2010-2011
253. Forces of Nature This course examines nature and its relationship to Latin American identity across the last 200 years, but with emphasis on the twentieth century. Paradise regained and lost, monster or endangered habitat, nature plays a central role in Latin American development and its literature. Its literary image has varied greatly in the nineteenth and twentieth centuries, at times suggesting the lost Garden of Eden, at other times mirroring human cruelty, and recently coming center stage in the ecological novel. Among the authors studied in this course are Sarmiento, Quiroga, Gallegos, Rulfo, Seplveda, Belli, and Montero. Prerequisite: Spanish 204 or proficiency. 6 credits, $A L$, RAD; LA, IS, Not offered in 2010-2011
254. Mexico Program: The Old and the New in Contemporary Mexico This course presents a survey of political, social, economic, and religious institutions and movements of contemporary Mexico, with attention paid also to their historical background. Classes are supplemented by visits to relevant sites and by lectures by local intellectuals when appropriate. Prerequisites: Spanish 204 or proficiency. 6 credits, ND; LA, IS, Not offered in 2010-2011
255. Myth and History in Central American Literature In this course we study the relationship between myth and history in Central America since its origins in the Popol Vuh, the sacred texts of the Mayans until the period of the post-civil wars era. The course is organized in a chronological manner. We will study, in addition to the Popol Vuh, the chronicles of Alvarado, some poems by Rubén Darío and Francisco Gavidia, some of the writings of Miguel Ángel Asturias and Salarrué. The course will end with a study of critical visions of the mythical presented by more contemporary authors such as Roque Dalton and Luis de Lión. 6 credits, AL; LA, IS, Not offered in 2010-2011
256. History of Human Rights This course proposes a genealogical study of the concept of Human Rights. The course will begin with the debates in sixteenth century Spain about the theological, political and juridical rights of "Indians." The course will cover four centuries and the following topics will be discussed: the debates about poverty in sixteenth century Spain; the birth of the concept of tolerance in the eighteenth century; the creation of the modern political constitution in the United States, France and Spain; the debates about women's rights, abortion and euthanasia, etc. 6 credits, $A L, R A D ; L A, I S$, Not offered in 2010-2011
257. Postwar Central American LIterature We study the resurgence of literature in Central America during the 1990s after the various political conflicts in the region (a civil war, a revolution and an insurgence). We will examine how the reconstruction of the public sphere in these countries included a rethinking of civil society via literature. We will study how literature from this period reimagines national frontiers as members of the diasporic communities that resulted from the political conflicts produced texts and posed difficult questions about what is a national literature. Among the authors studied will be Horacio Castellanos Moya, Jacinta Escudos Rodrigo Rey Rosa and Franz Galich. Prerequisite: Spanish 204 or equivalent. 6 credits, AL, RAD; LA, IS, Offered in alternate years, WinterY. Pérez
258. Spanish Seminar in Madrid: Independent Reading Basic readings in Spanish history and culture in preparation for the program. 2 credits, $S / C R / N C$, ND; NE, Fall-H. Huergo
259. Tragedy This course explores the development of the tragic notion from Aristotle to Hegel, focusing on a number of Spanish classics such as Cervantes, Calderón, Lorca, Valle Inclán, and others. Prerequisites: Spanish 205 or above. 6 credits, AL; LA, IS, Not offered in 2010-2011
260. New Spanish Voices Since 1980, Spain has experienced a literary and artistic boom, with scores of young novelists and filmmakers whose works challenge traditional notions of the individual and society. This course will examine some of these works, paying attention to regions of Spain normally excluded from the curriculum--Galicia, the Basque Country, and Catalonia. Discussions topics include gender and sexuality, cultural and personal memory, exile and migration, and the relationship between voice and power. Prerequisite: Spanish 205 or above. 6 credits, $A L, R A D ; L A, I S$, Fall-P. Álvarez Blanco
261. Writers in Exile Two countries and four writers will be the protagonists of our course: Guillermo Cabrera Infante, a refugee from the Cuban revolution living in London while trying to recover his lost city Habana through his writing; Reinaldo Arenas, another Cuban refugee dying of AIDS in New York while writing about his illness and exile; Spanish novelist Jorge Semprún, a deportee and survivor of a concentration camp established in Paris and writing in French; and Juan Goytisolo, a Spanish expatriated in Morocco, writing in Spanish and Arabic about his own country and the Muslim world. Prerequisite: Spanish 205 or above. 6 credits, AL; LA, IS, Not offered in 2010-2011
262. The Roaring Twenties The place: Madrid and Barcelona. The time: 1920s. The actors: the best minds of a brilliant generation of writers, painters, architects, and filmmakers Gómez de la Serna, Gasch, Miró, Moreno Villa, Gutiérrez Soto, Buñuel, Dalí, Lorca, Ortega. The event: jazz and assembly lines, photography and boxing, African masks and mechanical reproduction, sport cars and comic cinema, glass buildings and montage, mass entertainment and collective ennui, the October revolution and the rise of Fascism. Prerequisite: Spanish 205 or above. 6 credits, AL, RAD; LA, IS, Not offered in 2010-2011
263. The Invention of the Modern Novel: Cervantes' Don Quijote Among other things, Don Quijote is a "remake," an adaptation of several literary models popular at the time the picaresque novel, the chivalry novel, the sentimental novel, the Byzantine novel, the Italian novella, etc. This course will examine the ways in which Cervantes transformed these models to create what is considered by many the first "modern" novel in European history. Prerequisite: Spanish 205 or above. 6 credits, $A L ; L A, I S$, Spring—J. Brioso
264. Renaissance and Baroque The sixteenth and seventeenth centuries are known as the Golden Age of Spanish literature and art, with famous names such as Cervantes, Velázquez, Góngora, Calderón, St. Therese, St. John of the Cross, El Greco, and many others. This course offers an introduction to this extraordinary period by examining the works of some of its main writers and painters. Prerequisite: Spanish 205 or above. 6 credits, AL; LA, IS, Offered in alternate years, Winter-H. Huergo
265. Genealogies of the Modern: Turn of the Century Latin America We will study the experience of literary modernity (1870-1910) in the context of the configuration of emergent cities, urban culture, mass media, technological innovation, the modernization of the figure of the writer, and the vicissitudes of modern bourgeois subjectivity. A key emphasis will be placed on the raid on the European artistic archive and its forms of subjectivity. Texts by Martí, Darío, Rodó, Lugones, Silva, Gutiérrez Nájera, Nervo, Machado de Assis, and Agustini among others. Theoretical selections from Freud, Simmel, Benjamin, Corbain, Foucault, Montaldo, Molloy, Sarlo, and Rotker among others. Prerequisite: Spanish 205 or above. 6 credits, AL, RAD; LA, IS, Fall-S. López
266. Latin American Prose: Dictatorships and Revolution in the Latin American Narrative This course briefly examines the origins and development of the Latin American narrative and then focuses on the literary reaction to dictatorship and revolution. It stresses a critical reading and discussion of major works by Azuela, Castellanos, and Fuentes (Mexico), Asturias (Guatemala), and Allende (Chile). The emphasis is on Mexico and the literary interpretation of the Revolution of 1910 and the society that
grew out of it. Prerequisite: Spanish 205 or above. 6 credits, AL, RAD; LA, IS, Not offered in 2010-2011
267. Latin American Theater: Nation, Power, Gender Introduction to key themes and modes of production in twentieth century theater in Latin America. We will read representative plays from established playwrights such as Rodolfo Usigli, Griselda Gambaro, Manuel Puig, Sabina Berman, Mario Vargas Llosa, Mario Benedetti, Ariel Dorfman, Susana Torres Molina among others. The course will be organized around themes of national and cultural identity, relations of power, and the (de)construction of gender. Students will be asked to put on scenes and develop areas of research. Prerequisite: Spanish 205 or above. 6 credits, AL, RAD; LA, IS, Not offered in 2010-2011
268. Women Writers in Latin America: Challenging Gender and Genre The course will study texts (written by women) that deal critically with issues of gender, challenging implicit and explicit patriarchal values. Emphasis will also be placed on how these women have experimented with narrative and poetic genres to express their personal concerns and to deconstruct orthodox structures. Authors usually included: Sor Juana Inés de la Cruz, Storni, Agustini, Castellanos, Poniatowska, Molloy, Valenzuela, Ferré, Garro, Peri Rossi, Allende. Prerequisite: Spanish 240 or a 300 level literature course is recommended. 6 credits, $A L, R A D$; LA, IS, Not offered in 2010-2011
269. Spanish Seminar in Madrid: Theory and Practice of Urban Life More than a study of the image of Madrid in Spanish literature, this course examines the actual experience of living in a cosmoplitan city through a variety of disciplines, including Urban Studies, Philosophy, Architecture, Sociology, and Spanish poetry and fiction. 6 credits, AL, RAD; LA, IS, Winter-H. Huergo
270. Recent Trends in Latin American Narrative: Pop Culture and Testimony Postboom narratives question the very nature of telling stories, from Rigoberta Menchú's testimony of genocide to the virtual reality of MacOndo. Eduardo Galeano, Manuel Puig, and Elena Poniatowska are some of the writers we will examine, writers who combine fiction and reportage, recontextualize the novela rosa, or write an urban literature within a global context. What makes these new texts literature? How has the craft of author changed, and what constitutes a postmodern narrative discourse? Taught in Spanish. Prerequisite: Spanish 205 or above. 6 credits, AL, RAD; LA, IS, Winter-B. Boling
271. Film and the City The first images we have on film are of urban landscapes: a train arriving at the station, workers leaving the factory after a workday. This course examines the relationship that exists between cinematographic images and the life styles that cities generate. What relationship exists between different temporalities that intersect in the city and the temporality of the cinematographic image? In this course we will discuss how these questions were represented in classic film such as The Crowd by King Vidor or Metropolis by Fritz Lang and in Spanish films by Buñuel, Berlanga, Erice, Guerin, and Joaquín Jordá. Prerequisite: Spanish 205. 6 credits, AL; LA, IS, Fall-Jorge Brioso
272. History and Subjectivity in Latin American Poetry In this course we will examine this poetic experimentation in relation to the major political and ideological trends that have shaped Spanish American societies and cultures in the twentieth century. While focusing on the work of one major figure, we will read it in relationship to the poetry of other authors. Some authors included will be Pablo Neruda, Csar Vallejo, Gabriela Mistral, Nicanor Parra, Octavio Paz, Enrique Lihn, Ernesto Cardenal, Blanca Varela and Alejandra Pizarnik. Prerequisite: Spanish 205 or proficiency. 6 credits, $A L ; L A, I S$, Spring-J. Cerna-Bazán
273. The Cuban Revolution and the Revolution of Literature The Cuban Revolution symbolizes a moment of tremendous political, social, and cultural transformation in Latin America. Out of this political upheaval arose a cultural renovation that resulted in various forms of artistic experimentation as well as different narratives about the revolution. We will focus on several practices and discourses (literature, literary and cultural criticism, film and art) that were central to the debates fostered during this period. We will read some Latin American writers who wrote about the concept of revolution (Roque Dalton, Julio Cortázar, etc.), as well as Cuban authors who wrote about the Cuban Revolution
(Heberto Padilla, Nancy Morejón, etc.). 6 credits, AL; LA, IS, Spring-Y. Pérez
274. Topics in Hispanic Literature: The Spanish Civil War Considered by many historians the beginning of World War II, the Spanish Civil war served as the arena where the main ideologies of the twentieth century-Capitalism, Fascism, and Communism-first clashed. The result was not only one of the bloodiest wars in history, but also one of the most idealistic, with 40,000 volunteers from all over the world willing to die in defense of a country they did not even know. This course will explore the meaning of the war through a variety of mediums and disciplines, including literature, history, graphic arts, and films. Prerequisite: Spanish 205 or above. 6 credits, $A L, R A D$; LA, IS, Not offered in 2010-2011
275. Integrative Exercise 6 credits, $S / N C$, ND; NE, Fall, Winter, Spring—Staff

## THEATER AND DANCE

Chair: Associate Professor David Wiles
Professor: Ruth Weiner
Associate Professor: David Wiles
Assistant Professor: Judith Howard
Senior Lecturer: Walter Wojciechowski
Lecturers: Jennifer A. Bader, Mary A. Kelling, Allison Koster, Jane Shockley

The Department of Theater and Dance offers courses in each of the major areas of interest. Theater offerings include acting, voice, movement, directing, design-technical, and performance as well as courses in literature, history and criticism. In all of our courses our goal is to study the best of dramatic literature, as well as all the elements of production.

Dance activities give students at all levels opportunities for active participation in three basic areas: technique, choreography and analysis, and performance. The broadest goal of these offerings is to increase understanding of the art of dance as a contribution to a liberal arts education. Goals that are more specific are the development of a trained, articulate body, increased choreographic skill, and more finely honed performance.

While there is a regular major in Theater Arts, advanced students may apply to the chair of Dance for a special major in Dance.

## Dance Courses (DANC)

Technique Courses: 107, 147, 148, 150, 200, 204, 205, 206, 208, 214, 215, 300, 301, 309
Classes in Modern Dance Technique and Ballet are offered on at least two levels during all terms. Other technique classes offered on a rotating schedule are jazz, moving anatomy and contact improvisation. All courses may be taken any number of terms at the appropriate level. A maximum of 24 credits from dance technique classes may be counted toward graduation.

History Courses: Dance 115, 266
Choreography Courses: 190, 253, 350

## 107. Ballet I 1 credits, $S / C R / N C$, AL; ARP, Fall, Winter, Spring—J. Bader

115. Cultures of Dance Topics: Tradition, Transgression and Transnationalism in Japanese Dance Cultures This course will look at dance as culturally-coded, embodied knowledge and will investigate dance forms and contexts across the globe with an emphasis on Japanese theater/dance. We will establish a cross-cultural comparative foundation using feminist, Africanist and ethnographic lenses of inquiry. This reading intensive course in dance theory and practice will include a movement lab, writing, performance viewing, and guest speakers. The class will be part of the campus wide project "Vizualizing

Japanese Theater" and will coordinate with the art gallery exhibit: "The Art of Sight, Sound and Heart." No previous dance experience necessary. 6 credits, AL, RAD; HI, IS, Winter-J. Howard
147. Moving Anatomy This course seeks to provide an underlying awareness of body structure and function. Using movement to expand knowledge of our anatomy will encourage participants to integrate information with experience. Heightened body awareness and class studies are designed to activate the general learning process. 1 credits, $S / C R / N C, A L$; ARP, Spring-J. Shockley
148. Modern Dance I: Technique and Theory 1 credits, $S / C R / N C$, $A L$; ARP, Fall, Winter, Spring—J. Howard
150. Contact Improvisation This is a course in techniques of spontaneous dancing shared by two or more people through a common point of physical contact. Basic skills such as support, counterbalance, rolling, falling and flying will be taught and developed in an environment of mutual creativity. 1 credits, S/CR/NC, AL; ARP, Fall, Winter-J. Shockley
190. Fields of Performance This introductory course in choreography explores games, structures, systems and sports as sources and locations of movement composition and performance. Readings, viewings and discussion of postmodernist structures and choreographers as well as attendance and analysis of dance performances and sports events will be jumping off point for creative process and will pave the way for small individual compositions and one larger project. In an atmosphere of play, spontaneity and research participants will discover new ways of defining dance, pushing limits and bending the rules. Guest choreographers and coaches will be invited as part of the class. Open to all movers. No previous experience necessary. 6 credits, AL; ARP, Spring-J. Howard
200. Modern Dance II: Technique and Theory A continuation of Level I with more emphasis on the development of technique and expressive qualities. 1 credits, $S / C R / N C, A L$; ARP, Fall, Winter, Spring-

## J. Howard

204. Fall Dance Intensive rehearsal and performance of a work commissioned from a professional guest choreographer. Open to all levels. 1 credits, $S / C R / N C$, $A L ;$ ARP, Fall—J. Howard
205. Winter Dance Intensive rehearsal and performance of a work commissioned from a professional guest choreographer. Open to all levels. 1 credits, $S / C R / N C, A L$; ARP, Winter-J. Howard
206. Spring Dance Rehearsal and full concert performance of student dance works created during the year and completed in the spring term. Open to all levels. Prerequisites: One of the following: Dance 204, 205, 214, 215 or 350. 1 credits, S/CR/NC, AL; ARP, Spring—J. Howard, J. Shockley
207. Ballet II For the student with previous ballet experience. This course emphasizes articulation of technique and development of ballet vocabulary. 1 credits, $S / C R / N C$, $A L$; ARP, Fall, Winter, Spring-J. Bader
208. Fall Dance, Student Choreography For students enrolled in Dance 204, supervised student choreography with two public showings. I credits, S/CR/NC, AL; ARP, Fall-J. Howard
209. Winter Dance, Student Choreography For students enrolled in Dance 205, supervised student choreography with two public showings. I credits, S/CR/NC, AL; ARP, Winter-J. Howard
210. Movement for the Performer This course investigates the structure and function of the body through movement. Applying a variety of somatic techniques (feldenkrais, yoga, improvisation, bodymind centering). The emphasis will be to discover effortless movement, balance in the body and an integration of self in moving. 3 credits, AL; ARP, Offered in alternate years, Fall-J. Shockley
211. Reading The Dancing Body: Topics in Dance History Dance is an art of the body in time and space and culture. This course will look at dance as a symbolic system of meanings based on bodily display. The investigation of the body as a "text" will be anchored by, but not limited to, feminist
perspectives. Through reading, writing, discussing, moving, viewing videos and performances the class will "read" the gender, race, and politics of the dancing body in a historical context from Romanticism through Post-modernism. 6 credits, AL; HI, Not offered in 2010-2011
212. Modern Dance III: Technique and Theory Intensive work on technical, theoretical, and expressive problems for the experienced dancer. 1 credits, $S / C R / N C$, AL; ARP, Winter-J. Howard, J. Shockley
213. Contemporary Styles and Techniques: African Dance A physical exploration of the technical, theoretical and stylistic bases of different approaches to modern dance movement chosen yearly from such techniques as: Body Mind Centering; Limon; Cunningham; Graham; African-Caribbean. Prerequisite: some previous dance experience. 2 credits, $S / C R / N C, A L ;$ ARP, Fall—Staff

## 309. Ballet III 1 credits, $S / C R / N C$, $A L$; ARP, Spring—J. Bader

350. Semaphore Repertory Dance Company Provides advanced dance students with an intensive opportunity to develop as performers in professional level dances. Skills to be honed are: the dancer as "tool" and contributor to the process of art-making; defining individual technical and expressive gifts; working in a variety of new technical and philosophical dance frameworks. In addition to regular training during the academic terms, participation in a "preseason" rehearsal period before fall term is required. A few pieces of student choreography will be accepted for repertory. The group produces an annual concert, performs in the Twin Cities and makes dance exchanges with other college groups. Audition required. 1 credits, S/CR/NC, AL; ARP, Fall, Winter, Spring-J. Howard, J. Shockley

## Theater Arts (THEA)

Requirements for the major:
Sixty-eight credits distributed as follows:
a) 6 credits of one of the following courses in design or technical theater:

THEA 115 Introduction to Design and Technical Theater
THEA 236 Scenic and Lighting Design for the Theater (Not offered in 2010-2011)
b) 18 credits from the following courses in practical theater:

DANC 253 Movement for the Performer
THEA 110 Beginning Acting
THEA 185 The Speaking Voice
THEA 211 Intermediate Acting (Not offered in 2010-2011)
THEA 240 Directing I
THEA 241 Directing IITHEA 312 Problems in Acting (Not offered in 2010-2011)
c) 18 credits at the 300 level, at least six of which should be English 339 or Theater Arts 351 if possible (additional courses may be added to this group as approved):

ENGL 310 Shakespeare II
ENGL 339 Contemporary American Playwrights of Color (Not offered in 2010-2011)
ENGL 380 London Theater Program (Not offered in 2010-2011)
GERM 355 Topics in German Drama: Twentieth Century Theatrical Experiments (Not offered in 2010-2011)

RUSS 351 Chekhov
THEA 312 Problems in Acting (Not offered in 2010-2011)
THEA 351 Women Playwrights/Women's Roles (Not offered in 2010-2011)
d) 18 additional credits, six of which must be a non-theater course, in literature, criticism, or history courses from the following list:

CLAS 116 Ancient Drama: Truth in Performances
ENGL 244 Shakespeare

ENGL 310 Shakespeare II (Not offered in 2010-2011)
ENGL 258 Contemporary American Playwrights of Color
ENGL 282 London Theater Program
GERM 355 Topics in German Drama: Twentieth Century Theatrical Experiments (Not offered in 2010-2011)

GRK 204 Greek Tragedy
GRK 351 Aristophanes (Not offered in 2010-2011)
RUSS 351 Chekhov
SPAN 243/342 Latin American Theater: Nation, Power, Gender (Not offered in 2010-2011)
SPAN 255 Women Dramatists in Latin America: Staging Conflicts (Not offered in 2010-2011)
THEA 175 Drama/Theater/Text (Not offered in 2010-2011)
THEA 242 Twentieth Century American Drama (Not offered in 2010-2011)
THEA 246 Playwriting (Not offered in 2010-2011)
THEA 275 Topics in Theater History (Not offered in 2010-2011)
THEA 351 Women Playwrights/Women's Roles (Not offered in 2010-2011)
e) 2 credits of THEA 190, Players Production
f) 6 credits of 400, Integrative Exercise

## Theater Courses

100. Acting Up In this course we will read, see and write about a selection of major works from film, theater and television including films such as Crash, plays such as Stoppard's Arcadia and television series such as The Sopranos. We will look at these works both as literature and as performances. 6 credits, AI, WR1, Fall—R. Weiner
101. Beginning Acting Introduces students to fundamental acting skills, including preliminary physical and vocal training, improvisational techniques, and basic scene work. The course includes analysis of plays as bases for performance, with a strong emphasis on characterization. 6 credits, $A L ; A R P$, Winter-D. Wiles
102. Introduction to Design and Technical Theater An overview of the technical aspects of theater with an emphasis on the practical areas of the physical theater: drafting, materials, tools, lighting, costuming, scene painting, and properties 6 credits, AL; ARP, Fall-W. Wojciechowski
103. Drama/Theatre/Text We will study a selection of 10-15 plays as literary texts and as the foundations of performance. These plays are selected both for their literary stature and for their association with specific art and/or critical movements. 6 credits, AL; ARP, Not offered in 2010-2011
104. The Speaking Voice This course seeks to provide a practical understanding of the human voice, its anatomy, functioning and the underlying support mechanisms of body and breath. Using techniques rooted in the work of Berry, Linklater and Rodenburg, the course will explore the development of physical balance and ease and the awareness of the connection between thinking and breathing that will lead to the effortless, powerful and healthy use of the voice in public presentations and in dramatic performance. 6 credits, AL; ARP, Fall-D. Wiles
105. Carleton Players Production Each term students may participate in one Players production, a hands-on, faculty-supervised process of conceptualization, construction, rehearsal, and performance. Credit is awarded for a predetermined minimum of time on the production, to be arranged with faculty. Productions explore our theatre heritage from Greek drama to new works. Students may participate through audition or through volunteering for production work. 1 credits, $S / C R / N C, A L ; A R P$, Fall, Winter, Spring-R. Weiner, D. Wiles, Staff
106. Intermediate Acting Continuation of Theater Arts 110. Focus is on specific problems encountered
by all actors in performance, especially in stage movements, vocal range and flexibility, and details of characterization. Prerequisite: Theater Arts 110 or consent of the instructor. 6 credits, $A L ; A R P$, Not offered in 2010-2011
107. Rhetoric: Persuasion and Debate This course combines techniques developed for the training of actors with classical rhetorical theories to guide students in developing the ability to create and deliver persuasive arguments and engage in public debate. Classic examples of public address and debate including political speeches and legal arguments will be employed as teaching tools. 3 credits, $S / C R / N C$, ND; NE, Not offered in 2010-2011
108. Performing Shakespeare This course will explore a variety of methods for taking Shakespeare's text from the page to the stage. Using approaches developed in theaters in the United States and the United Kingdom, students will explore the use of poetry, argument and persuasive rhetoric in verse and prose. The course will focus on the ethical, political and social concerns addressed in Shakespeare's plays and through the use of video and audio recordings, students will critically examine various approaches to performing Shakespeare in the United States and abroad over the last century. Prerequisite: Theater Arts 110 or 185 or English 310 or by consent of the instructor 6 credits, $A L ; N E$, Spring-D. Wiles
109. Lighting Design for the Performing Arts An introduction to and practice in stage lighting for the performing arts. Coursework will cover the function of light in design; lighting equipment and terminology; communication graphics through practical laboratory explorations. Application of principles for performance events and contemporary lighting problems will be studied through hands-on applications. 3 credits, ND; ARP, Fall-A. Koster
110. Introduction to Stage Combat This is a hands-on course in which students will learn several techniques of stage combat. They weill rehears unarmed techniques. This will include: slaps, punches, falls, and basic sword work. The student will also learn themselves and their weapons to achieve a safe but convincing performance. 3 credits, AL; ARP, Spring-W. Wojchiechowski
111. Scenic and Lighting Design for the Theater Scenic and lighting design, seen from both the aesthetic and practical viewpoints, will be explored. Particular emphasis will be placed on presentational techniques, from the study of perspective to the finished rendering, the creation of the light plot to the instrument schedule. Prerequisite: Theater Arts 115.6 credits, AL; ARP, Not offered in 2010-2011
112. Topics in Theater Design A series of specialized courses in design and technical theater. Two topics are offered in tandem and will be determined according to the opportunities offered by the production of that term and the needs of the students with consideration to the rotation of the topics. Topics offered may include: Costume Construction, Armour and Weapons, Costume Patterning, Stage Management, Millinery, Multi-Media Production, Mask Making, Props and Casting Techniques, Textile Manipulation or Scene Painting. Prerequisite: Theater 115 or consent of instructor. 3 credits, AL; ARP, Not offered in 2010-2011
113. Topics in Theater: Costume Design A series of specialized courses in costume design and technical theater. The topic of this course is determined according to the opportunities offered by the departmental production of the term and the needs of the students, with consideration to the rotation of the topics. Topics offered may include: Costume Construction, Costume Patterning, Millinery, Mask Making, Textile Manipulation and Fabric Art. 3 credits, AL; ARP, Winter-M. Kelling
114. Directing I The aim of Directing I is to help build a conceptual base for directing. The purpose of all assigned work is to nurture your conceptual and imaginative response to theater texts, to help develop the technical skills you will need to implement your vision of a given test, and to lay a groundwork for collaboration with other theater artists. There will be some opportunity for production work. 3 credits, ND; ARP, IS, Winter- R. Weiner
115. Directing II Directing II is a practical directing workshop. Each member of the class will plan a full production and direct a short play or a full scene. 3 credits, ND; ARP, IS, Winter-R. Weiner
116. Twentieth Century American Drama A study of a selection of important American plays from Eugene O'Neill's Hairy Ape (1920) to Tony Kushner's Angels in America (1992) in the context of larger American themes and cultural preoccupations. The premise of this course is that these plays define the American theatre for most of this century. By studying them we will gain understanding of our own culture and the links that connect this culture to the transformative events of the century. 6 credits, $A L$; LA, Not offered in 2010-2011
117. Playwriting A laboratory to explore the craft of playwriting, concentrating on structure, action and character. The class uses games, exercises, scenes, with the goal of producing a short play by the end of the term. 6 credits, $S / C R / N C, A L ; ~ A R P$, Not offered in 2010-2011
118. Application of CAD to Design Process This class is a hands on exploration of the impact of CAD and Rendering Software has made on the theatrical design process. We will investigate how they affect the designer's creativity. What are the benefits and pitfalls of using these programs? Are these programs really timesavers? Prerequisite: Theater Arts 115 or permission of the instructor. 6 credits, ND; ARP, Not offered in 2010-2011
119. African-American Theater Crosslisted with THEA 352. This course will focus on developments in African-American Theater at particular points in its history during the nineteenth and twentieth centuries. The course will examine the development of theaters, theatrical movements, the contributions of relevant artists, and the relationship of theater to the struggle for African-American social and political equality. Students may take the course at the 200 or 300 -level. Those taking it at the 300 -level will be expected to complete a major research project. 6 credits, AL, RAD; LA, Not offered in 2010-2011
120. Problems in Acting Problems in Acting will focus on text analysis and questions of method, style and (acting) theory in the performance of scenes selected from plays of different periods and genres. Students will collaborate in the presentation of scenes and monologues taken from a broad variety of works. Prerequisite: Theater 110 or 211. 6 credits, AL; ARP, IS, Not offered in 2010-2011
121. Women Playwrights/Women's Roles A study of images of women in plays by Shakespeare, Ibsen, Strindberg, Tennessee Williams, and a number of women playwrights from Hellman and Clare Booth Luce to Caryl Churchill to Ntozaue Shange. 6 credits, AL; LA, IDS, Not offered in 2010-2011
122. African-American Theater Crosslisted with THEA 252. This course will focus on developments in African-American Theater at particular points in its history during the nineteenth and twentieth centuries. The course will examine the development of theaters, theatrical movements, the contributions of relevant artists, and the relationship of theater to the struggle for African-American social and political equality. Students may take the course at the 200 or 300 -level. Those taking it at the 300 -level will be expected to complete a major research project. 6 credits, $A L$, RAD; LA, Not offered in 2010-2011
123. Integrtive Exercise 1-6 credits, ND; NE, Fall—Staff

## Other Courses Pertinent to Theater:

CLAS 116 Ancient Drama: Truth in Performance
DANC 150 Contact Improvisation
DANC 253 Movement for the Performer
ENGL 116 Introduction to English Drama
ENGL 213 Christopher Marlowe
ENGL 214 Revenge Tragedy
ENGL 244 Shakespeare I
ENGL 258 Contemporary American Playwrights of Color

ENGL 310 Shakespeare II
PHIL 395 Samuel Beckett
SPAN 243 Latin American Theater in Translation: Nation, Power, Gender (Not offered in 20102011)

SPAN 342 Latin American Theater: Nation, Power, Gender (Not offered in 2010-2011)

## WOMEN'S AND GENDER STUDIES (WGST)

Director: Professor Barbara Allen

Assistant Professor: Meera Sehgal
LGBT Fellow: Angela Willey
Committee Members: Barbara Allen, Carol Donelan, Pamela Feldman-Savelsberg, Clara Hardy, Annette Igra, Diane M. Nemec Ignashev, Annette Nierobisz, Meera Sehgal, Kathryn Sparling

The Women's and Gender Studies Program provides an interdisciplinary meeting ground for exploring questions about women and gender that are transforming knowledge across disciplinary lines in the sciences, social sciences, arts, and humanities. Its goal is to include gender, along with class, sexuality and race, as a central category of social and cultural analysis. Courses focusing on women and gender are offered by the departments of Asian Languages and Literatures, Classics, English, German and Russian, French and Spanish, History, Cinema and Media Studies, Music, Religion, Philosophy, Political Science, Art, Sociology and Anthropology, as well as Women's and Gender Studies itself. Carleton offers both a Major and a Concentration in Women's and Gender Studies that allows students to complement their major field with an interdisciplinary focus on women and gender. All courses are open to all students, if they have fulfilled the prerequisites.

Women's and Gender Studies 110, an entry point to the major, is a topical introduction to the field. Women's and Gender Studies 200 and 234 provide the theoretical and methodological tools for advanced work on women and gender. The capstone course, Women's and Gender Studies 396, offers students the opportunity to study a topic in depth and to produce a substantial research paper. The major culminates in a senior comprehensive project, directed by advisers from two disciplines, that builds on the skills and interests developed in previous coursework in Women's and Gender Studies. Each student devises an appropriate program of courses in consultation with the major adviser.

## Requirements for a Major

Total of 66 credits
One introductory course, Women's and Gender Studies 110
One methodology course, Women's and Gender Studies 200 or 234
One capstone seminar, Women's and Gender Studies 396
Comprehensive Exercise, Women's and Gender Studies 400
In addition to these 24 credits, students must complete an additional 42 credits from the Women's and Gender Studies offerings listed below. Of these 42, no more than 12 credits should be at the 100 -level and at least 12 credits should be at the 300 -level. Ordinarily, no more than 18 credits may be applied to the major from outside of Carleton.

Students will plan these courses in consultation with the Program Director or a designated faculty adviser when they declare their major, and review their plan each term. The major they design should provide both breadth of exposure to Women's and Gender Studies across fields and depth of study in one discipline (normally at least two courses in one area or from one department).

## Women's and Gender Studies Courses

110. Introduction to Women's and Gender Studies This course is an introduction to the ways in which gender structures our world, and to the ways feminists challenge established intellectual frameworks. However, because gender is not a homogeneous category but is differentiated by class, race, sexualities, ethnicity, and culture, we also consider the ways differences in social location intersect with gender. 6 credits, HU, RAD; HI, IDS, Fall-D. Nemec Ignashev
111. Introduction to LGBT/Queer Studies This course is an introduction to the interdisciplinary examination of sexual desires, sexual orientations, and the concept of sexuality generally, with a particular focus on the construction of lesbian, gay, bisexual, and transgender identities. The course will look specifically at how these identities interact with other phenomena such as government, family, and popular culture. In exploring sexual diversity, we will highlight the complexity and variability of sexualities, both across different historical periods, and in relation to identities of race, class, and ethnicity. 6 credits, HU, RAD; HI, IDS, Fall—A. Willey
112. Feminist Ways of Knowing In this course we will examine whether there are feminist ways of knowing, the criteria by which knowledge is classified as feminist and the various methods used by feminists to produce this knowledge. Some questions that will occupy us are: How do we know what we know? Who does research? Does it matter who the researcher is? How does the social location (race, class, gender, sexuality) of the researcher affect research? Who is the research for? How can research relate to efforts for social change? While answering these questions, we will consider how different feminist researchers have dealt with them. 6 credits, SS; SI, IS, Not offered in 2010-2011
113. The Politics of Women's Health This course will explore the politics of women's health from the perspective of women of different races, ethnicities, classes and sexual orientations in the United States. The organization of the health care system and women's activism (as consumers and health care practitioners) shall frame our explorations of menstruation, sexuality, nutrition, body image, fertility control, pregnancy, childbirth, and menopause. We will cover basic facts about the female body and pay particular attention to adjustments the body makes during physiological events (i.e. menstruation, sexual and reproductive activity, and menopause). We will focus on the medicalization of these processes and explore alternatives to this medicalization. 6 credits, SS, WR, RAD; SI, WR2, IDS, Spring-M. Sehgal
114. Race, Gender, and Sexuality in Science This course will function as an introduction to feminist science studies with a particular focus on the production of race, gender, and sexuality in the biosciences. We will consider such questions as: What knowledges count as "science?" What is objectivity? How do cultural assumptions shape scientific knowledge production in different historical periods? What is the relationship between "the body" and scientific data? Is feminist science possible? We will draw on a range of sources including theories and critiques of science, primary science publications, pop science bestsellers, and the Science section of the New York Times. 6 credits, SS; SI, IDS, Winter-A Willey
115. Feminist Theory Feminism has to do with changing the world. We will explore feminist debates about changing the world using a historical framework to situate feminist theories in the context of the philosophical and political thought of specific time periods and cultures. Thus, we will follow feminist theories as they challenged, critiqued, subverted and revised liberalism, Marxism, existentialism, socialism, anarchism, critical race theories, multiculturalism, postmodernism and post-colonialism. We will focus on how theory emerges from and informs matters of practice. We will ask: What counts as theory? Who does it? How is it institutionalized? Who gets to ask the questions and to provide the answers? 6 credits, SS, RAD; SI, IS, Fall-B. Allen
116. Transnational Feminisms This course examines the field of transnational feminist theorizing and the practices of global feminisms. Using a comparative feminist solidarity model, we will learn how to cross the borders of nation, race, class and sexuality to engage with differently situated people. We will
focus on postcolonial feminist critiques of the western feminist lens and start developing self-reflexivity in terms of learning how to situate one's identity and work transnationally. We will map out the transnational dimensions of gender, race, class and sexuality, focusing in particular on nationalism, religious fundamentalism, militarism, globalization, and the politics of resistance. 6 credits, SS, RAD; SI, IS, Winter-M. Sehgal
117. Capstone Seminar: Rethinking the Sexual Body The purpose of this course is to provide a forum for students to consider the relationship between body theory, gender, and sexuality both in terms of theoretical frameworks within gender studies, and in terms of a range of sites where those theoretical approaches become material, are negotiated, or are shifted. We will pay particular attention to the historical slippage among racial, sexual, and classed bodily signs and symbols. The course is a fully interdisciplinary innovation. It will emphasize the links rather than differences between theory and practice and between cultural, material, and historical approaches to the body, gender, and sexuality. 6 credits, ND; SI, IDS, Spring-A. Willey
118. Integrative Exercise 6 credits, ND; NE, Fall, Winter, Spring—Staff

## Other Courses Pertinent to Women's and Gender Studies

AMST 251 Extraordinary Bodies in American Culture
ARTH 220 Gender and Genre in the Floating World: Japanese Prints (Not offered in 2010-2011)
ARTH 223 Women in Art
CAMS 225 Film Noir: The Dark Side of the American Dream
CAMS 226 The Melodramatic Imagination: Visual Storytelling in Popular Media and Fine Art (Not offered in 2010-2011)
CLAS 114 Gender and Sexuality in Classical Antiquity (Not offered in 2010-2011)
ENGL 218 The Gothic Spirit
ENGL 327 Victorian Novel (Not offered in 2010-2011)
FREN 241 The Lyric and Other Seductions
HIST 222 U.S. Women's History to 1877
HIST 223 U.S. Women's History Since 1877
HIST 236 Women's Lives in Pre-Modern Europe (Not offered in 2010-2011)
HIST 259 Women in South Asia: Histories, Narratives, and Representation (Not offered in 20102011)

HIST 330 Gender, Ethics and Power in Medieval France (Not offered in 2010-2011)
JAPN 234 Modern Japanese Novel in Translation: Mothers/Daughters; Fathers/Sons (Not offered in 2010-2011)
JAPN 236 Classical Japanese Fiction: The Tale of Genji and Its World in Translation
POSC 275 Identity Politics in America: Ethnicity, Gender, Religion
POSC 355 Identity, Culture and Rights*
PSYC 224 Psychology of Gender
RELG 230 Feminist Theologies (Not offered in 2010-2011)
RELG 236 Gender and Religion in the African Diaspora (Not offered in 2010-2011)
RELG 244 Prophetesses and Prostitutes, Murderesses and Matriarchs: Gender Roles in the Hebrew Bible (Not offered in 2010-2011)
RELG 258 Women and Buddhism (Not offered in 2010-2011)
RELG 284 The Virgin of Guadalupe (Not offered in 2010-2011)
RELG 322 Gender and God-Talk: Christian Feminist Theologies (Not offered in 2010-2011)
SOAN 226 Anthropology of Gender (Not offered in 2010-2011)
SOAN 395 Ethnography of Reproduction (Not offered in 2010-2011)
SPAN 244 Spain Today: Recent Changes through Narrative and Film

SPAN 255 Women Dramatists in Latin America: Staging Conflicts (Not offered in 2010-2011)
SPAN 344 Women Writers in Latin America: Challenging Gender and Genre (Not offered in 20102011)

## WOMEN'S AND GENDER STUDIES CONCENTRATION

Director: Professor Barbara Allen

The Women's and Gender Studies Concentration offers students the opportunity to complement their major field with an interdisciplinary focus on women and gender.

## Requirements for the Concentration

Six courses will be required from the following three groups. The range of courses must include at least two disciplines.
I. Women's and Gender Studies 110: Introduction to Women's and Gender Studies
II. Core Courses ( 4 courses or 24 credits):

ARTH 223 Women in Art
CAMS 225 Film Noir: The Dark Side of the American Dream
CAMS 226 The Melodramatic Imagination (Not offered in 2010-2011)
CLAS 114 Gender and Sexuality in Classical Antiquity (Not offered in 2010-2011)
EDUC 360 Gender, Sexuality and Schooling (Not offered in 2010-2011)
ENGL 218 Gothic Spirit
ENGL 319 The Rise of the Novel
ENGL 327 Victorian Novel (Not offered in 2010-2011)
HIST 222 U.S. Women's History to 1877
HIST 223 U.S. Women's History Since 1877
HIST 229 Gender and Work in U.S. History
HIST 236 Women's Lifes in Pre-modern Europe (Not offered in 2010-2011)
HIST 238 The World of Bede (Not offered in 2010-2011)
HIST 238 Topics in Medieval History: Church, Papacy and Empire (Not offered in 2010-2011)
HIST 259 Women in South Asia: Histories, Narratives and Representation (Not offered in 20102011)

HIST 330 Gender, Ethics and Power in Medieval France (Not offered in 2010-2011)
JAPN 234 Modern Japanese Novel in Translation: Mothers/Daughters; Fathers/Sons (Not offered in 2010-2011)

JAPN 236 Classical Japanese Fiction: The Tale of Genji and Its World in Translation
POSC 275 Identity Politics in America: Ethnicity, Gender, Religion
POSC 355 Identity, Culture, and Rights*
RELG 224 Women and Christianity (Not offered in 2010-2011)
RELG 236 Gender and Religion in the African Diaspora (Not offered in 2010-2011)
RELG 244 Prophetesses and Prostitutes, Murderesses and Matriarchs: Gender Roles in the Hebrew Bible (Not offered in 2010-2011)

RELG 284 The Virgin of Guadalupe (Not offered in 2010-2011)
RELG 322 Gender and God Talk: Christian Feminist Theologies (Not offered in 2010-2011)
SOAN 226 Anthropology of Gender (Not offered in 2010-2011)
SPAN 255 Women Dramatists in Latin America: Staging Conflicts (Not offered in 2010-2011)
SPAN 344 Women Writers in Latin America: Challenging Gender and Genre (Not offered in 2010-2011)

WGST 200 Feminist Ways of Knowing
WGST 234 Feminist Theory
III. Capstone Seminar: WGST 396: Capstone Seminar: Rethinking the Sexual Body. Other advanced seminars may be substituted for the designated capstone seminar only with the approval of both the instructor and the Women's and Gender Studies director.

## Special Study Programs / Off-Campus Study Programs

## Special Study Programs

To meet the needs of individual students, Carleton offers a wide variety of special programs including opportunities for independent and interdisciplinary work and off-campus studies. Students expecting credit for participation in an off-campus program, whether in the United States or abroad, during the academic year or the summer, should check with the Off-Campus Studies Office, Leighton 119, for procedures, required forms, applications, and deadlines.

## Off-Campus Study

$70 \%$ of the class of 2009 participated in off-campus study during their years at Carleton. Carleton offers a changing selection of seminars and winter break programs every year, conducted by Carleton faculty in the United States and abroad. In addition, the College co-sponsors 32 other programs and approves participation of students in other non-Carleton institution-led programs. Students who plan to participate in a non-Carleton program must complete an OCS petition and receive approval from the OCS office prior to participation.

## Other Programs for Off-Campus Study

In addition to the programs above, which Carleton sponsors or co-sponsors, students can select from over 80 additional non-Carleton programs, which the student and her/his academic adviser believe will further the student's educational goals. Students who plan to participate in a non-Carleton program must complete an OCS petition and receive approval from the OCS office prior to participation. Students who are approved for off-campus study by the College may earn up to 54 credits (one year's worth) to be applied to their Carleton degree. Students are encouraged to learn more about off-campus study opportunities and information about specific programs by visiting the Off-Campus Studies office in Leighton 119 and by visiting its website: go.carleton.edu/ocs.

## Carleton Off-Campus Seminars

Carleton seminars offer a related group of courses conducted by Carleton faculty for Carleton students, using the resources of a site other than the Northfield campus. Students are selected by application two to three terms preceding the actual program. Students pay the Carleton comprehensive fee, which covers room, board, tuition, plus excursions and social events at the program site. Transportation to the site, books, and personal expenses are the responsibility of each student. Financial aid applies to these and one non-Carleton off-campus study program approved by the College. During the 2010-2011 academic year, the following programs will be part of the Carleton curriculum. A brochure is available for each program in Leighton 119.

Residing at Hughes Hall of Cambridge University, students will study British Economics, past and present. Numerous excursions, including the Midlands, London, sites near Cambridge in East Anglia, and a trip to the Continent, will expand the classroom study.

Director: Lauren Feiler, Assistant Professor of Economics

## Courses:

- ECON 221 Contemporary British Economy, 4 credits
- ECON 222 The Industrial Revolution in Britain, 6 credits
- ECON 223 The Life of J.M. Keynes, 4 credits, S/CR/NC
- ECON 224 British Cultural Exports, 4 credits


## Spanish Seminar in Madrid, fall term, 18 credits

Spanish language program for advanced students, based in Madrid's Universidad Complutense. Course work focuses on providing a comprehensive view of Spanish literature, history and art. Home stays, group excursions, and participation in lecture series, theater programs, music and art seminars.

Director: Humberto Huergo, Professor of Spanish

## Courses:

- SPAN 290 Independent Reading, 2 credits, $\mathrm{S} / \mathrm{CR} / \mathrm{NC}$
- SPAN 209 Current News, 6 credits
- SPAN 247 Spanish Art from El Greco to Picasso, 4 credits
- SPAN 349 Madrid: Theory and Practice of Urban Life, 6 credits


## Cross-Cultural Psychology Seminar in Prague, fall term, 18 credits

Students live and study in Prague, the capital of the Czech Republic. The course of study includes cross-cultural psychopathology, modern Central European history, and elementary Czech language or modern Czech art. To help experience the culture and history of the region firsthand, students will participate in lectures, discussions, cultural events, walking tours, and out-of-town trips, including Krakow and the Auschwitz concentration camp in Poland, Poprad and the High Tatra mountains in Slovakia, and the medieval towns of Kutna Hora and Cesky Krumlov in the Czech Republic.

Director: Ken Abrams, Assistant Professor of Psychology

## Courses:

- PSYC 358 Cross-Cultural Psychopathology, 6 credits
- EUST 278 Politics and Culture in Central Europe in the Twentieth Century, 6 credits
- PSYC 290 Directed Reading, 2 credits, S/CR/NC


## Electives:

- LCST 101 Communicating in the Czech Republic, 4 credits, $\mathrm{S} / \mathrm{CR} / \mathrm{NC}$, or
- ARTH 215 Modern Art in the Czech Lands: Nineteenth-Twenty-First Centuries, 4 credits, $\mathrm{S} / \mathrm{CR} / \mathrm{NC}$


## Chinese Studies Seminar in Tianjin, China, fall term, 18 credits

Chinese language and culture program at Nankai University located in Tianjin, the third largest city in China. Language study, Chinese civilization, society, and culture including art, Taichi, and/or other martial arts. Modern accommodations in an international dormitory will provide ample opportunity to speak Chinese and experience Chinese culture.

## Director: Qiguang Zhao, Professor of Chinese

## Courses:

- CHIN 207/307 Chinese Language, 9 credits
- CHIN 212 Chinese Culture, 3 credits, S/CR/NC
- CHIN 282 Chinese Civilization, 6 credits


## Studio Art Seminar in the South Pacific, winter term, 18 credits

The goal of this program is to bring together studio art practice with the challenges and advantages of off-campus study-drawing from nature in a new environment, studying social issues in the context of a foreign setting, and producing narrative work in response to travel. In the first half of the seminar students will study Polynesian culture, the Coromandel Peninsula, and the Tongariro National Park. The second half of the seminar will include a few weeks in Sydney, Australia, a trip to the rain forest of Lamington, and a visit to the Great Barrier Reef.

Director: Fred Hagstrom, Professor of Studio Art

## Courses:

- ARTS 212 Mixed Media Drawing, 6 credits
- ARTS 274 Printmaking, 6 credits
- ARTS 275 The Physical and Cultural Environment of Australia and New Zealand, 6 credits, S/CR/NC, RAD, SS
- PE 136 Independent Activity—Snorkeling, Diving, and Hiking, Optional PE Credit


## Comparative Welfare Systems and Social Safety Nets in Australia, winter term, 18 credits

Based at the Australian National University in Canberra, the program engages students in the study of comparative welfare systems, community needs assessment and program evaluation, and offers a 10week internship placement. To help experience the nearest beach region firsthand, students will travel to Kialoa, ANU's coastal retreat for a weekend of lectures, discussions, and recreation. Short excursions to Tasmania and Wellington, New Zealand are also planned to learn more about comparative welfare systems for a State within Australia and for its closest culturally alike neighbor.

Director: Peter Brandon, Professor of Sociology

## Courses:

- SOAN 276 Comparative Welfare Systems: Three Case Studies, 6 credits
- SOAN 275 Community Needs Assessment Evaluation, 6 credits
- SOAN 393 Policy Internship, 4 credits, S/CR/NC
- SOAN 290 Directed Reading, 2 credits, $\mathrm{S} / \mathrm{CR} / \mathrm{NC}$


## Conservation and Development in Tanzania and Ethiopia, winter term, 18 credits

The program focuses on the study of conflict between conservation and development. Students will travel throughout the northern Tanzania, the highlands of Ethiopia, as well as to the birthplace of coffee in Ethiopia. The academic program centers on directed learning modules and independent fieldwork with an emphasis on teamwork. Visits to cultural sites and interactions with Tanzanian and Ethiopian scientists are important aspects of the program.

Director: Tsegaye Nega, Assistant Professor of Environmental Studies

## Courses:

- ENTS 244 Biodiversity Conservation and Development, 6 credits
- ENTS 200 Food and Agriculture, 6 credits
- ENTS 280 Research Projects on Conservation and Development, 4 credits
- ENTS 284 Cultural Studies,


## English Theater and Literature Seminar in London, spring term, 16 credits

The goal of the London program is to immerse the students in the best and most varied performance the city has to offer, and to make use of local museums and other cultural sites to enhance the study of British literature. The group will attend productions of classical and contemporary plays in London and may travel to Stratford-on-Avon to see Royal Shakespeare Company productions.

## Director: Constance Walker, Professor of English

## Courses:

- ENGL 281 Regency London, 6 credits
- ENGL 282 London Theater, 6 credits
- ENGL 290 Directed Reading, 4 credits, $\mathrm{S} / \mathrm{CR} / \mathrm{NC}$


## French Studies Seminar in Paris, spring term, 18 credits

The program will make extensive use of local resources, both in Paris and Geneva, providing students with a unique opportunity for language immersion, cultural analysis, and personal growth. In addition to classes and excursions, students may pursue activities such as sports, dance, music lessons, etc.

Director: Éva Pósfay, Professor of French

## Courses:

- FREN 208 Conversation and Composition, 6 credits
- FREN 246 City of Wonders: Paris in the Arts, 6 credits
- FREN 249/349 European Identities: Paris \& Geneva, 6 credits


## New Media Seminar in Europe, spring term, 16 credits

Discover the cutting edge of new media (Digital Arts) by visiting museums, exhibitions, and artists in New York and Europe. In addition to reading in history and theory, students create projects in photography, video, or Web-based applications that reflect their encounters.

Director: John Schott, James W. Strong Professor of Liberal Arts

## Courses:

- CAMS 291 Directed Reading-Cultural and Technological Perspectives on Place and Location, 4 credits, S/CR/NC
- CAMS 269 Understanding New Media, 6 credits
- CAMS 289 Special Projects, 6 credits


## European Political Economy Seminar in Madrid and Maastricht, spring term, 18 credits

This program is designed for students interested in European politics and political economy, particularly the development of the European Union and regional issues. Students examine the formation, development institutions, laws, and major policies of the European Union. They work in research groups and conduct fieldwork in two sub national regions during the term. There are several excursions, including Belgium, Luxembourg, Germany, and France.

Director: Alfred Montero, Associate Professor of Political Science

## Courses:

- POSC 383 Politics of the European Union, 6 credits
- POSC 388 Spanish Politics and Political Economy, 6 credits
- POSC 392 Comparative Field Research Methods, 6 credits, S/CR/NC


## Winter Break Programs

Carleton offers three changing winter break programs. Students register for a fall term course, spend two weeks on site during winter break, and return to campus winter term for a follow-up course. These programs are made possible by the Peter G. Thurnauer Memorial Winter Break Programs Fund.

## Tropical Rainforest Ecology, Costa Rica

The goal of the fall course is to survey the most contemporary and influential published work in rainforest ecology. Topics to be emphasized include the latitudinal gradient in species diversity, evolutionary ecology, and interactions between species. During the two-week field investigation students perform extensive field experiments planned during Biology 361 and will present their findings winter term.

Director: Mark McKone, Professor of Biology

Fall term course: BIOL 361 Tropical Rainforest Ecology, 6 credits,
Winter Break field work and Winter term course: BIOL 362 Field Investigation in Tropical Rainforest Ecology, 6 credits

## History, Memory, And The Atlantic World, Ghana and the United States

Students study the Atlantic slave trade, European colonialism, and national independence in Ghana. During the winter break students conduct field research, and the winter term course enables students to complete and give oral or visual presentations on topics developed during the program.

Director: Harry M. Williams, Professor of History
Fall term course: HIST 381 History, Memory, and the Atlantic World: Ghana and the United States, 6 credits

Winter Break field work and Winter term course: HIST 382 History, Memory, and the Atlantic World: On Site and Revisited, 6 credits

## Ruins And Romantics: English Gothic And Gothic-Revival Art And Architecture, England

These two courses explore interpretation of medieval English culture by anti-modernists such as the PreRaphaelites, Arts \& Crafts workers, and others.

Director: Baird Jarman, Associate Professor of Art History
Fall term course: ARTH 251 Ruins \& Romantics: English Gothic and Gothic-Revival Art and Architecture, 6 credits

Winter Break field work and Winter term course: ARTH 351 English Art and Architecture On Site, 6 credits

Seminar Cancellation Policy: Carleton College shall have the right, at its option and without liability, to make cancellations, changes, or substitutions in cases of emergency or changed conditions or in the interest of the program.

## Programs Co-Sponsored By Carleton

For specialized areas of study, Carleton has combined with other colleges to develop off-campus study programs. For each of these programs, Carleton representatives participate in the management, Carleton faculty often serve as instructors and directors, and Carleton students participate along with others from the member colleges and universities.

ASSOCIATE KYOTO PROGRAM (AKP), IN KYOTO, JAPAN, academic year only
Students with background in Japanese live with Kyoto families and enroll at Doshisha University in intensive language classes plus two courses each term conducted by visiting professors from AKP member colleges or Doshisha faculty.

HIGHER EDUCATION CONSORTIUM FOR URBAN AFFAIRS (HECUA), fall and spring semesters

These 15 -week programs provide the opportunity to learn from local and international faculty who integrate theory with real-life urban issues. Home stays, interviews, community immersion activities and field research are used throughout the programs, which are open to all majors. Brochures on individual programs are available in the Off-Campus Studies Office, Leighton 119.

COMMUNITY INTERNSHIPS IN LATIN AMERICA (CILA) in Quito, Ecuador, fall and spring semester

SCANDINAVIAN URBAN STUDIES (SUST), in Oslo, Norway, fall semester only
DIVIDED STATES OF EUROPE, in Oslo, Norway and Poland, spring semester only
METRO URBAN STUDIES (MUST), in Minneapolis and St. Paul, MN, fall or spring semester
ENVIRONMENTAL SUSTAINABILITY: SCIENCE, POLITICS AND PUBLIC POLICY, AND COMMUNITY ACTION Minnesota, fall semester only

NORTHERN IRELAND, DEMOCRACY AND SOCIAL CHANGE, in Coleraine, Northern Ireland, spring semester only

CITY ARTS, in Minneapolis and St. Paul, MN, spring semester only
WRITING FOR SOCIAL CHANGE, in Minneapolis and St. Paul, MN, fall semester only
INTER-COLLEGIATE SRI LANKA PROGRAM (ISLE), fall semester only
This 15-week program enrolls 15-20 students from eight consortium colleges to study the culture, history, religion and political structure of Sri Lanka. In-depth studies include Buddhist thought and practice, conversational Sinhala, and an independent research project. Students live with host families in Kandy.

## Associated Colleges of the Midwest Programs (ACM)

Thirteen programs in the United States and abroad are sponsored by the 13 consortium members of the Associated Colleges of the Midwest. A resident director for each program is recruited from member colleges. Courses are conducted by the ACM director and by staff at the program site. Brochures about each program are available in the OCS Office and applications from the faculty advisers.

ACM Brazil Exchange, spring semester, advisers: Tsegaye Nega and Alfred Montero
ACM Business and Society in Chicago, fall or spring semester, adviser: Michael Hemesath
ACM Chicago Arts Program, fall or spring semester, adviser: Nicole Melville
ACM Studies in Latin American Culture and Society, fall semester only, adviser: Andrew Fisher

ACM Tropical Field Research, Natural and Social Science, in Costa Rica, spring semester only, adviser: Andrew Fisher

ACM Florence, Italy, fall semester only, adviser: Alison Kettering
ACM India Studies, fall semester, adviser: Arnab Chakladar

ACM Japan Studies, fall semester or academic year, advisers: Kathleen Sparling (fall), Noboru Tomonari (winter and spring)

ACM London and Florence Arts in Context, February-May spring semester, January option for Italian language, adviser: Alison Kettering

ACM Newberry Library Program in the Humanities, in Chicago, fall semester and other short-term seminars and tutorials, adviser: Jessica Leiman

ACM Oak Ridge Science Semester Natural Sciences in Oak Ridge, Tennessee, fall semester only, adviser: Will Hollingsworth

ACM Tanzania in Human Evolution and Ecology, July-December semester adviser: Bereket Haileab
ACM Botswana: Culture and Society in Africa, spring semester, adviser: Bereket Haileab
ACM Urban Studies, in Chicago, fall or spring semester, adviser: Adrienne Falcón

## Other Programs for Off-Campus Study

In addition to the programs above, which Carleton sponsors or co-sponsors, students can select from over 80 additional non-Carleton programs, which the student and her/his academic adviser believe will further the student's educational goals. Students who plan to participate in a non-Carleton program must complete an OCS petition and receive approval from the OCS office prior to participation. Students who are approved for off-campus study by the College may earn up to 54 credits (one year's worth) to be applied to their Carleton degree. Students are encouraged to learn more about off-campus study opportunities and information about specific programs by visiting the Off-Campus Studies office in Leighton 119 and by visiting its website: go.carleton.edu/ocs.

## Professional Preparation

Preparation for Professional Schools: The Carleton curriculum does not provide programs which are recommended for all students intending to enter a particular professional school upon completion of their BA degree. Although there are no special programs designated as pre-law, pre-medicine, preministerial, and so on, Carleton does have a pre-law and a pre-med adviser; each year many Carleton graduates continue their education in various professional schools. At Carleton, a regular program of studies in one of the established major fields is generally recommended as the best preparation for further training. In consultation with their faculty advisers and the department chair, students can arrange a program of study which best suits their own needs and objectives, without restriction to one program which is adjudged the best for all circumstances and cases.

Students planning to enter any of the professions listed below should see the chair of their department and the appropriate pre-professional adviser. The staff at the Career Center can provide assistance to students who are seeking more information about these career fields as well as internship and summer job information related to these careers. The following comments may be helpful for those who plan to specialize later.

ARCHITECTURE: Graduate schools of architecture do not require a specific major but most require or recommend drawing (ARTS 110, see also ARTS 113 and 210), calculus, and physics. A portfolio of visual materials is also required; students may want to take additional courses in studio art in order to build up their portfolio. Courses in the history of art and architecture are further recommended. For information consult the chair of the Department of Art and Art History.

BUSINESS AND MANAGEMENT: Carleton does not offer courses in business and governmental administration, yet a large proportion of its graduates seek and obtain careers in the management of business firms, government agencies, and nonprofit enterprises such as hospitals, schools, and fine arts centers. Potential employers as well as graduate schools of business, public policy, and law, urge students to take several courses in economics and selected courses in mathematics, especially computer programming and statistics. Interested students can discuss careers in these fields with the chair or any member of the economics department.

CHEMISTRY: The American Chemical Society recommends the following courses for certification: Chemistry 123, 230, 233, 234, 301, 302, 306, 320, 343, 344, 351, 352 and two more advanced courses plus research experience.

DENTISTRY: See Medicine below.
EDUCATION: Preparation for Careers in Public Education: In most states, teaching licensure is a basic requirement for a career in public education, whether as a classroom teacher, administrator, counselor, librarian, or in a variety of supervisory positions. Students planning a teaching career in public education should consult a member of the Educational Studies Department early in their first year.

Programs leading to 5-12 teaching licensure are available at Carleton in the areas of: communication arts (English), mathematics, life sciences, earth sciences and social studies (American studies, African/African American studies, economics, history, political science, psychology, and sociology and anthropology). 7-12 licensure preparation is available in chemistry and physics; K-12 licensure preparation is available in visual arts and world languages (French, German, Spanish). For other fields Carleton students have completed their chosen major and then met professional requirements for licensure through a fifth year at another institution, usually earning a master's degree in elementary education.

The teacher education program at Carleton College is accredited by the Minnesota Department of Children, Families, and Learning and is in full compliance with Federal Title II regulations for disclosure of state-mandated examination pass rates. For 2002-2003 through 2009-2010, the Carleton licensure candidates pass rates were 100 percent for all areas; a detailed disclosure statement is available from the Educational Studies Department.

Carleton-Bank Street Program in Elementary Education: During their junior year, Carleton students may apply to the Bank Street College of Education for admission to its Master of Science program in
elementary education. Following their junior year, students will take two July summer session courses at Bank Street, then return to Carleton to complete their senior year. After receiving their BA from Carleton, they will return to Bank Street to complete their MS in education and requirements for New York State elementary licensure. Students interested in this program should speak to the chair of the Educational Studies Department no later than the spring of their sophomore year.

ENGINEERING: A Combined Plan in Engineering is offered in cooperation with Columbia University and with Washington University (St. Louis). Under this plan a student combines three years of study at Carleton with two years at one of the collaborating institutions. After completion of the five-year program, the student is awarded two degrees, a BA degree from Carleton and a BS degree from the engineering school. Students majoring in chemistry, mathematics, or physics are eligible for participation in this program, provided they plan early in their college careers to complete those courses at Carleton which are necessary for admission to one of these schools at the end of three years. All Carleton proficiency and distribution requirements must be met, and the integrative exercise in the major field must be completed during the junior year. In an effort to broaden the engineering opportunities similar programs have been approved on an individual basis at other engineering schools with national reputations and with academic expectations similar to Carleton's.

Information concerning the Combined Plan in Engineering may be obtained from Nelson Christensen, Department of Physics and Astronomy. Students who expect to pursue this option should consult with him as early as possible in their college careers to make certain that their programs of study are suitable. Students intending to enter an engineering program in graduate school should also consult with him.

HOSPITAL ADMINISTRATION OR HEALTH SYSTEMS MANAGEMENT: The Carleton degree can provide the requisite background for graduate degree programs in these areas in schools of public health or for special programs in some schools of business administration. Interested students should contact Pam Middleton, Pre-Med adviser or the Career Center.

JOURNALISM AND PUBLISHING: After receiving a BA degree, students can obtain an MA in journalism after one year in a professional school. Many newspaper and magazine editors prefer to employ beginners with experience on college publications and a broad liberal arts education. Students who wish to become journalists are advised to take courses in economics, history, political science and English. Prospective journalists are strongly advised to write for The Carletonian and for other campus publications, to work for other newspapers and magazines during the summer, and to seek out internships on newspapers and magazines and in publishing houses, all of which offer ample opportunity for students to obtain practical experience.

LAW: Most important for law school admission is the development of skills of expression, logic, and verbal and quantitative analysis. What major the student chooses in order to acquire and improve these skills is unimportant. Law schools typically look for a variety of backgrounds and majors among their applicants.

A Combined Plan in Law is offered in cooperation with the Columbia University School of Law. Under this plan a student combines three years of study at Carleton with three years at Columbia Law School. After completion of the six year program, the student is awarded two degrees, a BA degree from Carleton and a JD degree from Columbia. Admission is limited to about two persons per year. Information on the combined plan may be obtained from the Pre-Law adviser. Application should be made early in the junior year.

LIBRARY AND INFORMATION SCIENCE: A master's degree from a school of library and information science accredited by the American Library Association is the normal credential needed by those planning a career in librarianship. The BA degree with a broad general background in the arts and sciences is the best preparation for graduate study in library and information science. Any undergraduate major is acceptable, however there is a particular demand for people with science backgrounds. For a career in academic libraries, a second subject masters is highly recommended and a PhD is highly desirable. Librarians who are well equipped to help shape the hybrid digital library, comprised of an increasingly rich mix of information media and genres, are in great demand. Coursework and practical experience in computer/information science, and facility with all manner of software used in creating, retrieving, manipulating, and presenting information is highly valued. Students with an interest in librarianship can gain practical experience through a wide variety of student jobs in the College library, and as Educational Associates.

MEDICINE: It is suggested that students discuss questions relating to preparation for medical training with Pam Middleton, Pre-Med adviser. Most students who plan to enter medicine, veterinary medicine, or dentistry, major in a science, but a major in any field is acceptable to most medical, veterinary medical, or dental schools, providing certain basic science courses are included. The specific requirements of the various medical schools are listed in Medical School Admissions Requirements. A copy of this book and other medical school information can be found in the Career Center Library.

MINISTRY: Theological seminaries advocate a broad general background with courses in languages, philosophy, social science, history, English, sciences, and religion.

SOCIAL WORK: The Council on Social Work Education has recognized the following sequence of courses at Carleton as containing social welfare content, and they are recommended for those planning a career in social work: Sociology/Anthropology 220, Class, Power and Inequality in America. Also recommended as courses related to this sequence are: Psychology 250, Developmental Psychology; 252, Personality; 254, Psychopathology; 354, Counseling Psychology.

## Admissions

Admission to Carleton is based on several considerations. Of importance are superior academic achievement, as demonstrated in the applicant's school record and scores on the required entrance examinations; personal qualities and interests; participation in extracurricular activities; and potential for development as a student and a graduate of the College. The Committee on Admissions weighs all factors to ensure that those students offered admission are not only adequately prepared for the academic work, but also will benefit from their total experience at Carleton and add significantly to the College through their individual talents and personal qualities.

Carleton strives to enroll a diverse student body with varied racial, ethnic, socio-economic, religious, cultural and political backgrounds, as well as geographic origins of its students. The College believes such diversity promotes spirited classroom discussion, provides an opening to a variety of viewpoints and life experiences, helps prepare students for a diverse workplace, and develops interpersonal skills for a pluralistic world.

There is no composite Carleton student. He or she possesses a variety of qualities not measurable in test scores: warmth, openness, a sense of humor, an active interest in social service and in community involvement, initiative, resourcefulness, motivation and personal courage. Although many applicants rank in the top tenth of their high school classes with SAT critical reading, writing or math scores above

700, many attractive candidates do not. A sizeable number not possessing such lofty credentials are admitted in the belief that these are restrictive measures of ability and success and do not always assess adequately the human characteristics which are so important to the quality of a student's success in Carleton's residential liberal arts environment.

Application for Admission: Students interested in applying to Carleton should visit the admissions website at http://apps.carleton.edu/admissions/apply/. Online application is free, however if a student wishes to apply with a paper application, a $\$ 30.00$ fee will then be required. This fee is not refundable and is not credited on any subsequent bill. Each applicant is responsible for providing the admissions office with all items requested to complete their application.

Early Decision: Those who decide that Carleton is their first choice college are encouraged to apply under the Early Decision program. Early Decision is a commitment to attend if accepted. Students may submit applications to other colleges or universities, but not under another early decision plan. Those accepted will be expected to withdraw all other applications.

Early Decision candidates are reviewed at two different times of the year, but whenever the student applies, the criteria for selection are identical. Students electing the Early Decision option should submit all necessary materials by one of the following dates:
a) November 15. The Admissions Committee will mail decisions by December 15 and admitted candidates will have until January 15 to submit the $\$ 300$ confirming deposit.
b) January 15. The Admissions Committee will mail decisions by February 15 and admitted candidates will have until March 1 to submit the $\$ 300$ confirming deposit.

Regular Decision: Applicants on Regular Decision will receive notification from the College by April 15 of the senior year. Those offered admission will have until May 1 to make the $\$ 300$ deposit.

## APPLICATION SCHEDULE FOR FALL TERM ADMISSION

|  | All <br> Application <br> Materials <br> Must Be <br> Postmarked <br> by: | Complete <br> Testing <br> by: | File CSS <br> Financial <br> Aid <br> PROFILE <br> Application <br> by: | Mailing of <br> Admissions <br> Decisions <br> On or <br> Before: | Applicant's <br> Reply Date |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EARLY <br> DECISION <br> (Fall) | Nov. 15 | Nov. 15 | Nov. 15 | Dec. 15 | Jan. 15 |
| EARLY <br> DECISION <br> (Winter) | Jan. 15 | Dec. 31 | Jan. 15 | Feb. 15 | March 1 |
| REGULAR <br> DECISION | Jan. 15* | Feb. 1 | Feb. 15 | April 15 | May 1 |


| TRANSFER | March 31* | Feb. 28 | March 31 | May 15 | June 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |

* Applications may be submitted after this date, but priority will be given to those applying on or before the deadline.

The initial $\$ 300$ payment will only be refunded in case of illness which makes it impossible for a student to enter the College at the time for which he or she has been accepted.

Late Applicants: Students who submit applications postmarked after January 15 each year must recognize they are applying on a space-if-available basis. In some years, the College is able to offer admission to late applicants; in other years, the first-year student class may be filled and students to whom we would like to offer admission must be placed on a waiting list to see if vacancies occur in late spring or early summer.

Early Admission: Each year, a number of students apply for admission following the junior year of high school. Some may be graduating early, others may be willing to forego the senior year to begin college early. The College welcomes such applications with the following understanding: Successful Early Admission candidates almost always display a high degree of social and emotional maturity, present unusually strong academic credentials and have exhausted their secondary school curricular possibilities.

Deferred Admission: Deferred admission is not for an alternative college academic experience. If a deferred student chooses to study elsewhere, credit will not be transferred to Carleton. Deferred students who take post-secondary courses elsewhere cannot do so on a full-time basis or as a degree-seeking student without violating the terms of their deferral.

Candidates who wish to defer college for a year following completion of secondary school may apply for admission during their senior year. The application should be accompanied by a statement describing the candidate's reasons for desiring to delay matriculation, plans for the interim year and perceived benefits of the delay. Such requests should be made by May 1 if at all possible.

Transfer Students: Carleton accepts a number of transfer students for each fall term. Students wishing to apply for the fall term should submit applications prior to March 31 and will be notified of the Admissions Committee's decision before May 15. All transfer applicants are expected to submit results from the College Board's SAT I or the American College Test. To qualify for the Carleton degree, students must spend at least two years in residence including the senior year.

Requirements for Admission: The strongest candidates for admission to Carleton have taken four years of English, three or more years of mathematics, two or more years of science and three or more years of social science. At a minimum, applicants should have three or more years of English (with a stress on writing), at least two years of algebra and a year of geometry, two years of social science and one year of a laboratory science. Most Carleton students go well beyond this minimum, and the Admissions Committee is usually attracted to candidates who take advantage of the opportunity to do honors or advanced placement work. Normally, students will be expected to take two or more years of a foreign or classical language unless it is not offered in the school. The greater the number of courses in the subjects listed above, the more the applicant's qualifications for admission are strengthened. An applicant of unusual ability and interest whose secondary school program does not include all of these courses may be granted admission on the basis of his or her school record, the scores on standardized tests, and the recommendations of school officials.

Carleton recognizes achievement in the arts and encourages students to submit slides, CDs, DVDs, or other evidence of their work with their application.

Admissions Testing: Believing that the Admissions Committee is best able to make sound judgments about candidates' academic abilities when the secondary school record is supplemented by the results of standardized examinations, Carleton requires each applicant to submit results of the SAT I or the American College Test (ACT) prior to admission. If the ACT is submitted, Carleton requires the writing component of that test. Further, we recommend but do not require, that candidates submit the results of their SAT II subject tests. We have found these tests valuable aids in the assessment of the quality of student achievement in a wide variety of secondary school programs. It has been our experience that SAT II test results usually enhance a candidate's credentials and only rarely constitute a negative factor.

Students whose first or native language is not English should submit official TOEFL (Test of English as a Foreign Language) scores.

Interviews and Visits: When possible, each applicant may have a personal interview with a member of the admissions office staff, an alumni admissions representative or a designated representative of the College. Visitors to the admissions office should make an appointment well in advance of their intended visit. A CAMPUS VISITS brochure, giving detailed information on class visits, overnight accommodations and transportation is available. Prospective students may also arrange a campus visit through the Carleton website at http://apps.carleton.edu/admissions/visit/. The admissions office is open for appointments on weekdays from 8:30 a.m. to 12 noon and 1 to $4: 30$ p.m., and during the academic year on Saturdays from 8:30 a.m.to 12 noon. From June through September, the office is closed on Saturdays. The office is located in Johnson House, 100 South College Street.

Rooms: In the late summer, all new students are assigned rooms which will be held until the first day of registration. The College reserves the right to change students' room assignments whenever such changes are deemed advisable and to use student rooms for its own purpose during vacation periods.

Financial Assistance: Carleton's financial aid policy is based on the premise that the family has the primary responsibility for meeting the expenses associated with attending the College, to the extent they are able. Families applying for financial aid will undergo a "need analysis" to determine their ability to contribute. The difference between the cost of attendance, as set by the College, and a family's expected contribution equals the demonstrated financial need, which Carleton will endeavor to meet through grants, loans and work-study.

There is no separate Carleton application for financial aid. Carleton requires financial aid applicants to complete both the Free Application for Federal Student Aid (FAFSA) and the College Board's Financial Aid PROFILE form.

## Prior Credits Policy

Carleton accepts up to 36 credits toward the Carleton degree from the following: College Board Advanced Placement credits, International Baccalaureate credits, or approved pre-matriculation credits (credits earned in college-level courses taken before graduation from high school or before matriculation at a college or university). These credits may not be applied to distribution requirements.

The faculty urges prospective students to take advantage of opportunities for advanced study available to them.

Several departments on campus offer tests to determine student placement into appropriate level Carleton courses. Some placement examinations are administered via the Web during the summer prior to matriculation; others are offered during New Student Week.

Carleton language and math placement test scores indicate the course the student should register for (e.g., a 204 in Spanish means you should register for Spanish 204). A score of 205 in French, German, Latin, Russian or Spanish (or 206 in Arabic, Chinese or Japanese) means that the language requirement has been satisfied. SAT II scores of 690 and above for French or Spanish or 680 and above for German successfully fulfill the Language Requirement.

Courses and credits completed with a grade of C- or better at other regionally accredited institutions prior to matriculation at Carleton are transferable to Carleton-with limitations mentioned elsewhere in this Catalog—providing Carleton deems the course level and content to be compatible with its undergraduate liberal arts curriculum. Prior credits earned from colleges otherwise accredited may be considered for transfer upon receipt of documentation that demonstrates comparability of course level and content. Carleton does not grant transfer credit for independent study or credit by examination completed at a prior college. Carleton does not grant transfer credit for life or work experience, nor does it grant credit for vocational study.

In the disciplines of foreign language and mathematics, Carleton requires placement exam results to determine transferability of credits earned at a prior college.

Students who are admitted as transfer students are expected to complete a minimum of 108 credits and six terms at Carleton to be eligible for the degree.

College credits completed elsewhere after matriculation at Carleton will not be considered for transfer to Carleton unless preapproved by the Academic Standing Committee and the Registrar or unless they were completed as part of an approved off-campus study program.

## College Entrance Examination Board (CEEB) Advanced Placement

The following policies regarding CEEB Advanced Placement examination scores apply for the 20102011 academic year:

ART AND ART HISTORY—Art History: Score of 5: 6 credits granted. Studio Art (2D, 3D or Drawing): Score of 4 or 5: 6 credits granted (maximum twelve credits from Studio Art AP) Placement awarded beyond ARTS 110, but only after departmental review of the portfolio. Credits do not apply to either major.

BIOLOGY-Score of 5: 6 credits granted that count toward the biology major and placement is awarded into Biology 126; Biology 125 is not required for upper-level courses in biology. Score of 3 or 4: 6 credits granted, placement into either Biology 125 or Biology 126; both introductory courses are required for upper-level courses in biology.

CHEMISTRY—Score of 3: Placement is awarded into Chemistry 123 or 128. Score of 4 or 5: 6 credits granted that count toward a chemistry major and placement is awarded into Chemistry 230 (Equilibrium and Analysis). Students receiving this AP credit cannot also get credit for Chemistry 123 or 128. The Chemistry Department strongly encourages students receiving AP credit to wait until their sophomore year to take Chemistry 233 (Organic Chemistry I).

CLASSICAL LANGUAGES—Greek: There is no Greek Advanced Placement Test, however, credits, placement, and fulfillment of the Language Requirement may be awarded to new students with the appropriate knowledge of ancient Greek. Take the Greek placement exam on-line. Latin Literature, Virgil: Score of 1-4: No credit granted. Placement determined after taking the on-line Latin exam. Score of 5: 6 credits granted and the Language Requirement fulfilled either by passing the departmental online Latin Placement Test or by placing into and successfully completing Latin 204 with a grade of C- or above.

COMPUTER SCIENCE-Computer Science A: Score of 3, 4, 5: exemption granted for Computer Science 111; 6 credits granted which count toward a computer science major (for Computer Science 111) after successful completion of Computer Science 201, 202, 204 or 208 with a grade of C- or better.

Computer Science AB: Score of 3, 4, 5: exemption granted for Computer Science 111 and 201; 6 credits granted which count toward a computer science major (for Computer Science 201) after successful completion of Computer Science 202, 204, or 208 with a grade of C- or better. Note that exemption but no credit is granted for Computer Science 111 for the Computer Science AB exam.

ECONOMICS—Only Economics Micro: Score of 5: 6 credits and exemption granted from Principles of Economics 111 course. Only Economics Macro: Score of 5: 6 credits and exemption granted from Principles of Economics 110 course. Both Economics Micro and Macro: Score of 5: 6 credits and exemption granted from Principles of Economics 110 and 111 courses.

ENGLISH—Language/Composition: Score of 4 or 5: 6 credits granted. Literature/Composition: Score of 4 or 5: 6 credits granted.

ENVIRONMENTAL SCIENCE—Score of 4 or 5: 6 credits granted.
FRENCH—Language: Score of 1, 2, 3: No credit or placement awarded. If the Language Requirement is to be fulfilled with the French language or placement in the French course sequence is desired, take the French Placement Test. Score of 4 or 5: 6 credits granted; placement awarded into any course above Level 204; Language Requirement fulfilled. Literature: Score of 4 or 5: 6 credits granted and placement awarded into any French course above Level 204; Language Requirement fulfilled.

GEOGRAPHY-No course credit offered.

GERMAN—Language: Score of $1,2,3$ : No credit or placement awarded. If the Language Requirement is to be fulfilled with the German language, or placement with the German course sequence is desired, take the German Placement Test. Score of 4: 6 credits granted and the Language Requirement fulfilled by achieving exemption through the on-campus German Placement Test. Score of 5: 6 credits granted; placement awarded into any course for which the level 204 language class is a prerequisite; Language Requirement fulfilled.

HISTORY-Score of 4 or 5: 6 credits granted for each exam. The History department grants credit toward the major and toward certain fields within the major for scores of 4 or 5 on the Advanced Placement examinations in United States and European history only. The History department will count no more than 12 pre-matriculation credits total toward the major from approved exams (AP and/or IB), and majors are strongly encouraged to count no more than 6 such credits toward the major.

MATHEMATICS and STATISTICS—Calculus AB: Score of 3, 4, 5: 6 credits granted which count toward a mathematics major (for Mathematics 111) after successful completion of Mathematics 121
with a grade of C- or better. Calculus BC: Score of 3, 4, 5: 12 credits granted which count toward a mathematics major (for Mathematics 111 and 121) after successful completion of Mathematics 211 with grade of C- or better. Statistics: Score of 4 or 5: placement into Mathematics 245; 6 credits granted after successful completion of Mathematics 245 with a grade of C- or better.

MUSIC—Theory: Score of 4 or 5: 6 credits granted and exemption from Music 200.
PHYSICS—B: Score of 3, 4, or 5: 6 credits granted. Score of 3 suggested placement into Physics 131 or 132. Score of 4 or 5 suggested placement into Physics 141 or 142. Physics C Mechanics and Physics C Electricity/Magnetism: Score of 3, 4, or 5 on both exams: 6 credits granted. Score of 4 or 5 suggested placement into Physics 141 or 142. Placement into higher courses possible, but will be determined individually upon consultation with the department. Physics C Mechanics: Score of 3, 4 or 5: 3 credits granted. Score of 4 or 5 suggested placement into Physics 141 or 142. Placement into higher courses possible, but will be determined individually upon consultation with the department.

POLITICAL SCIENCE-American Government Score of 5: 6 credits granted which fulfill the Political Science 122 requirement for a major in the Department of Political Science. Comparative Government Score of 5: 6 credits granted which fulfill the Political Science 120 requirement for a major in the Department of Political Science.

PSYCHOLOGY-Score of 4 or 5: 6 credits and exemption from Psychology 110 granted after successful completion (C- or better) of any Psychology course numbered in the 200's.

SPANISH—Language: Score of 4 or 5: 6 credits granted; placement awarded into any course above Level 204; Language Requirement fulfilled. Literature: Score of 4 or 5: 6 credits granted and placement awarded into any course above Level 204; Language Requirement fulfilled.

## International Baccalaureate

Carleton's policy for the 2010-2011 academic year on awarding credit for International Baccalaureate Higher level examinations is as follows:

ART—Studio Art (Drawing and General): Score of 6 or 7: 6 credits granted. Placement awarded beyond ARTS 110, but only after departmental review of the portfolio.

BIOLOGY-Score of 4 or 5: 6 credits granted, placement into either a) Biology 125 fall term (Dyad), b) the winter term offering of Biology 125, c) Biology 126. Score of 6 or 7: 6 credits granted that count toward the biology major and placement is awarded into Biology 126.

CHEMISTRY—Score of 4: Placement is awarded into Chemistry 123 or 128. Score of 5, 6, or 7: 6 credits are granted that count toward the chemistry major and placement is awarded into Chemistry 230 (Equilibrium and Analysis). Students receiving this IB credit cannot also get credit for Chemistry 123 or 128. The Chemistry Department strongly encourages students receiving IB credit to wait until their sophomore year to take Chemistry 233 (Organic Chemistry I).

CHINESE-Score of 5, 6 or 7: 6 credits granted if student successfully fulfills the language requirement through the Carleton Chinese placement exam.

ECONOMICS—Score of 6 or 7: 6 credits and exemption granted from Economics 110 and 111.

ENGLISH—Score of 5, 6, or 7: 6 credits granted.
FRENCH—Score of 6 or 7: 6 credits granted; placement awarded into any course for which the level 204 language class is a prerequisite; Language Requirement fulfilled.

GERMAN— Score of 6 or 7: 6 credits granted; placement awarded into any course for which the level 204 language class is a prerequisite; Language Requirement fulfilled.

HISTORY-Score of 5, 6, or 7: 6 credits granted for each exam. The History department grants credit toward the major and toward the "Early Modern/Modern Europe" field within the major for scores of 5, 6, or 7 on the International Baccalaureate Higher Level examination in European history. Credit toward the History major for examinations in History of Asia/Oceania; History of Asia/Middle East and the History of Africa will be considered and determined by the department, adviser, and chair on a case by case basis. The History department will count no more than 12 pre-matriculation credits total toward the major from approved exams (AP and/or IB), and majors are strongly encouraged to count no more than 6 such credits toward the major.

JAPANESE-Score of 5, 6, or 7: 6 credits granted if student successfully fulfills the language requirement through the Carleton Japanese placement exam.

LATIN—No course credit offered. Placement subject to Carleton Placement Exam.
MATHEMATICS—Score of 5, 6, or 7: credits are granted when a student successfully completes the course into which placement was awarded with a grade of C - or better. See the Department Chair for placement.

MUSIC-Score of 5, 6, or 7: 6 credits granted.
PHILOSOPHY—Score of 5, 6, or 7: 6 credits granted.
PHYSICS—Score of 5, 6, or 7: 6 credits granted. Placement into courses will be determined individually upon consultation with the Department.

PSYCHOLOGY-Score of 6 or 7: 6 credits and exemption from Psychology 110 granted after successful completion (C- or better) of any Psychology course numbered in the 200's.

RUSSIAN—Score of 5, 6, or 7: 6 credits granted if student successfully fulfills the language requirement through the Russian placement exam.

SPANISH-Score of 6 or 7: 6 credits granted; placement awarded into any course for which the level 204 language class is a prerequisite; language requirement fulfilled.

## Expenses

Comprehensive Fee: Students attending Carleton pay an all-inclusive fee, called a comprehensive fee, which is regarded as an annual charge rather than the sum of charges for each term covering tuition, room, board, and student activities. There are no special fees charged for laboratory work or field trips, or for diplomas upon graduation. All students are entitled to admission without charge to most athletic contests, concerts, plays, movies, lectures and other campus events. These activities as well as
subscriptions to the student publications are covered by the student activity fee. For 2010-2011 the comprehensive fee totals $\$ 52,110$ and it is allocated as follows:

Tuition $\$ 41,076$

Room \$5,676

Board \$5,130

Activity Fee \$228

Special Fees: The department of music offers private lessons in applied music. These fees per term for individual instruction in all instruments, and use of practice facilities are: after the drop/add deadline, a term fee of $\$ 255$ is billed to each student for weekly (normally 9 ) half-hour lessons ( 1 credit) per term, or $\$ 510$ for weekly (normally 9 ) hour lessons ( 2 credits). Class Guitar and African Drum Class are $\$ 75$ each. Junior and senior music majors receive up to four credits per term of lessons free of charge. Students on financial aid who experience difficulty in meeting the cost of private lessons may apply for financial assistance for such expenses directly to the Office of Student Financial Services.

Consumable materials and supplies are not included in the comprehensive fee, special fees may apply. Contact the Student Financial Services Office for financial assistance eligibility requirements.

Student health insurance is available at additional cost for those not covered by another plan. Note: proof of health insurance is required. For possible financial assistance to cover the cost of health insurance, contact the Student Financial Services Office for eligibility requirements.

Students residing in the Village Apartments are assessed a $\$ 25$ per term laundry facilities fee for use of non-coin operated machines in these facilities. This fee will be reflected in the overall cost for room and board for students assigned to rooms in the Village Apartments.

For off-campus independent study, including summer reading not required for a fall term course, the fee for each two credits or fraction thereof is the tuition for one credit during the academic year in which the credit is granted. Credit by examination and off-campus internships are charged on the same basis.

For students who apply to non-Carleton off-campus studies programs after the deadlines for each term, a non-refundable fee of $\$ 300$ will be charged. Payment of the fee does not insure acceptance in a program and no refund will be made in case of non-acceptance. "To apply after the deadlines" means completed forms as required by the Off-Campus Studies Office (OCS) are received by the OCS office after their stated deadlines.

Enrollment Deposit: In addition to the comprehensive fee, all enrolling students are required to pay and maintain an enrollment deposit of $\$ 300$, which functions as a confirming admissions deposit. $\$ 250$ of this toal becomes a continuing enrollment deposit for subsequent years. This deposit ( $\$ 250$ ) will be returned to the parent upon graduation, withdrawal from the College, or a leave for any reason. Any unpaid business Office obligations will be applied against this deposit at the time of withdrawal or graduation. The remaining $\$ 50$ of the deposit is used as a lifetime transcript fee where students may request college transcripts from the Registrar without cost.

## Calendar of Payments:

When filing for admission (application fee): \$30
When accepted (enrollment deposit): \$300
August 15: \$17,370
December 15: \$17,370

March 15: $\$ 17,370$
Total: \$52,110
Students are held responsible for payment of their college fees. Students will receive e-mail notifications, using the student's Carleton e-mail address, when the term bills are available on-line. In cases of postponed account settlement, for which special arrangements are made in the Business Office, a note must be signed covering the amount of unpaid balance. An $8 \%$ per annum charge will be made on postponed accounts

A monthly payment plan is available through TuitionPay Plan, an outside vendor.
Penalties: Students' accounts are regarded as delinquent and subject to penalty if payments are not made at the specified times, or if arrangements have not been made for later payment. The penalty for late payment of fees is $\$ 35$.

A student will not be permitted to register for the following term until his or her account has been cleared by the Business Office. The student will be withdrawn from the College if the Business Office has a financial block on the student's tuition account for a prior term's past due balance. The student will not be permitted to return to campus when classes start for the upcoming term. If otherwise eligible, the student may apply for readmission for the subsequent term.

College policies on deposits and refunds apply to off-campus studies; in addition, a $\$ 400$ penalty is assessed for late withdrawals before the start of the program. See the Off-Campus Studies Planning Guide: Approval and Departure for Off-Campus Study and the student's letter of participation.

Refunds: If a student leaves during the first two weeks of the term, as defined by the academic calendar; a $25 \%$ tuition refund is available:

Term Last day available
Fall $2010 \quad$ September 24, 2010
Winter 2011 January 14, 2011
Spring 2011 April 8, 2011
If a student leaves due to illness during the first half of the term, as defined by the academic calendar; a $50 \%$ tuition refund is available:

Term Last day available

Winter 2011 February 3, 2011
Spring 2011 April 28, 2011

Room charges will not be refunded.
Board charges will not be refunded.
Financial aid will be reduced according to federally mandated guidelines.
Applied music fees will be refunded, with charges deducted for lessons received, only if the student notifies the department of music within the first two weeks of the term.

In the event of a national emergency all charges will be refunded pro rata to students drafted or called as military reservists unless they have attended courses a sufficient length of time to earn academic credit.

If a student wishes to transfer to another institution he or she must settle accounts in the Business Office by making necessary payments or arrangements for extension before a transcript of credits will be issued.

No refunds will be made to students suspended or dismissed from the College.

A more restrictive refund policy governs withdrawal from Carleton off-campus programs. This policy is explained in the Off-Campus Studies Planning Guide for each program.

## Housing and Residential Life

As a residential college, Carleton requires all students to live in College operated residences and participate in the College dining plan.

Residence halls and campus houses are an integral part of the Carleton learning experience. Living with other students provides many informal opportunities for students to learn about themselves, develop friendships, and discuss new ways of thinking. The mission of Residential Life is to create a healthy, safe and thriving environment where students can gain experience, be involved and develop their interpersonal, academic, and leadership potential. Our professional Hall Directors and student Resident Assistants (RAs) help plan social, educational, and recreational activities in the halls and houses. These staff members are available to assist students in many ways throughout the academic year.

Carleton College offers a variety of housing options because we recognize that residential options are desirable and beneficial for students. Housing opportunities include traditional residence halls, suites, houses, apartments and Northfield Option. Northfield Option is a program that allows a very limited number of seniors to live in non-College owned housing. Students must receive prior approval from Residential Life to be eligible for this option. Students who are married or have dependent children living with them will be exempted from the residency and board requirements upon providing documentation to the Residential Life Office.

## Financial Aid

Philosophy: Carleton's tradition of extending educational opportunities to academically qualified students and meeting their financial need is based on a deep commitment to the belief that a true liberal arts education exposes students to varying backgrounds and points of view outside as well as inside, the classroom. For this reason, in addition to the more pragmatic one that many parents cannot afford the cost of education today, Carleton encourages high school students to apply for admission without regard to their financial circumstances. The basic philosophy underlying the student financial aid program at Carleton is that families have the primary responsibility to finance their children's education to the extent that they are able. When a family cannot afford our costs, Carleton is committed to meeting a student's need with various types of aid for all those admitted, for all four years.

How to Apply: Carleton is a member of the College Scholarship Service (CSS), a division of the College Board, which processes the confidential statements submitted by families in support of their application for financial assistance. The many colleges using the service join in the belief that financial aid should be awarded to students only after careful consideration of the family's ability to contribute to the cost of their children's education and determination of their demonstrated financial need. All families who wish to be considered for financial aid must complete the CSS PROFILE. In addition, the Free Application for Federal Student Aid (FAFSA) must be completed to qualify for any applicable federal and state assistance. No separate Carleton aid form is required for students. However, all student applicants and their parents must submit completed and signed copies of their previous year's federal income tax returns, including W-2 forms and all schedules, to finalize any financial aid award. In selected cases, Carleton reserves the right to request copies of tax returns directly from the IRS.

Terms of Assistance: When financial need is demonstrated, assistance will be granted under the following conditions:

All financial aid awards are made for only one year at a time. It is customary to meet the student's total demonstrated need by utilizing a combination of grants, student employment, and loans. With the exception of student employment and outside scholarships, financial aid is distributed equally at the beginning of each term (i.e. fall, winter, spring terms). Student employment earnings are direct deposited to the student and are paid according to the number of hours worked at the end of each pay period. The student may arrange with the Business Office to have all or part of these earnings applied directly to their tuition account.

Receipt of any financial assistance from sources other than Carleton College must be reported to the Office of Student Financial Services. These outside awards will result in an adjustment in the financial aid package in order to remain within a student's calculated financial need and to utilize all resources available to that student. Under Carleton's outside aid policy, outside or private scholarships first reduce the student's self-help awards (loans and/or student employment) on a dollar-for-dollar basis. In this way, the students benefit directly by reducing their loan debt and/or their work hours. It is the College's policy to not reduce grants until all self-help components of the award have been eliminated. The exception to this policy involves Federal Pell Grants, Minnesota State Grants, and other need-based federal or state grant programs. Adjustments to the loan or student employment awards resulting from outside aid are made in succeeding years upon receipt of those funds.

It is the responsibility of the student to submit a complete financial aid application (CSS PROFILE, FAFSA, parent and student federal tax returns and follow-up forms) before established deadlines. Deadline dates are "priority deadlines" and will be enforced according to the availability of aid funding
for that year. Those that meet the deadline will be given consideration for assistance first. Other applications will be considered according to the date received and current funding levels.

Renewal of Aid: Financial aid forms must be completed each year. A student and his or her family may assume that the College will continue to provide comparable assistance for subsequent years insofar as the family's financial circumstances remain stable. As those circumstances change, financial aid may also change. It is important to understand that financial aid administered by the College is not renewed automatically. Parents and students must complete and submit the necessary forms and need analysis documents each year (i.e. CSS PROFILE, FAFSA, parent and student federal tax returns). At Carleton, financial aid is related to demonstrated financial need rather than academic measures. However, students must make satisfactory academic progress toward graduation in order to have their aid renewed.

## Types of Financial Aid Available

Merit Aid: A small proportion of Carleton's financial aid is given as non-need or merit based aid. The scholarships that are merit based are the National Merit Scholarship, National Achievement Scholarship, and the National Hispanic Recognition Scholarship. Those students who select Carleton as their firstchoice college with the National Merit Scholarship Corporation will receive a scholarship worth $\$ 2,000$ per year, for four years. The Bailey Instrumental Music Scholarship is also considered merit based aid available to students majoring or intending to major in music and who study and perform on orchestra strings, woodwinds, and brass instruments. Auditions are required and the scholarship is worth a minimum of $\$ 2,000$ per year, plus music lessons and support for summer music institutes.

Need-Based Aid: There are two major categories of need-based aid: gift aid and self-help aid. The gift aid is given to the student in the form of grants and scholarships and does not need to be repaid. The self-help aid needs to be either earned (student employment) or repaid (student loans).

Gift Aid includes grants and scholarships. The majority of the dollars received by students at the College is in the form of Carleton grants and Carleton scholarships. To the student, there is no difference whether they have received a grant or scholarship from the College. Any student who is eligible for need-based aid is reviewed to determine if they have the appropriate characteristics for one of many Carleton scholarships (no separate scholarship application is required). Students receiving a Carleton scholarship are informed of the donor or source of their scholarship and may be asked to recognize them for their gift. All students are also reviewed for eligibility for federal and state grants. To be eligible for gift aid, a student must apply for financial aid by completing the CSS PROFILE and FAFSA and submitting parent and student federal tax forms.

The majority of gift aid that Carleton distributes includes the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (SEOG), Federal Academic Competitiveness Grant (ACG) and National Science and Mathematics Access to Retain Talent (SMART) Grant, Minnesota State Grant, and Carleton grants and scholarships. A description of each of these aid types may be found on the Student Financial Services Website.

Self-Help Aid comes in two forms. The first is student employment. Most students receiving need-based financial aid are awarded student employment, with first-year students authorized to work up to eight hours per week and returning students up to ten hours per week. The dollars awarded for the hours worked represent an opportunity for students to earn money toward college expenses. The dollars awarded represent a maximum that can be earned during the academic year. The exact dollars earned may be influenced by the hours available from the employer and student schedule for a term. Hours not
worked and awarded dollars not earned may be converted to additional self-help aid (i.e. loans). Students are usually assigned campus jobs, although some students are assigned off-campus jobs at nonprofit organizations. Student employees may choose to apply all or a portion of their earnings to their tuition account through the Business Office website. Otherwise, earnings are directly deposited into the student's checking or savings account at the end of each pay period.

The second form of self-help aid is student loans. Loans allow students to finance a portion of their education through utilization of future earnings resulting from and enhanced by the benefits of their college education. These loans must be repaid after the student has graduated or enrollment has ceased. Most student loans may be deferred if the student continues their education beyond their Bachelor's Degree.

The self-help aid distributed most commonly at Carleton College includes student employment, Perkins Loans, and William D. Ford Federal Direct Loans subsidized and unsubsidized, and PLUS (Parent Loans for Undergraduate Students). A description of each loan, including eligibility, annual loan limits, current interest rates, and repayment terms can be found at the Student Financial Services Website.

Other Financing Option: Families at Carleton College may participate in an interest free monthly payment plan that allows for payment of the comprehensive fee for a particular academic year. Equal payments for a 12 month period start June 1 or equal payments for an 11 month period start July 1. The plan has a $\$ 55$ annual fee to enroll. The TuitionPay Plan may be used to cover all or a portion of annual tuition, fees, room and board. The deadline to enroll is July 25 . The exact terms and conditions of the monthly payment plan are determined annually and may differ from what is described here.

Parents who would like more information or an application for the TuitionPay Plan should call visit www.tuitionpay.salliemae.com or call 800-635-0120 or contact the Business Office at Carleton College at 507-222-4179

## Special Funds

Support of the College: As an independent, privately endowed institution, Carleton's development has been made possible by the support of interested individuals, foundations, and corporations. Student tuition payments cover only about one-half of the College's educational and general expenses. Most of the balance comes from gifts for current purposes and from income earned by the College's endowment, which was itself provided by gifts.

Honorary Scholarships: WILLIAM CARLETON SCHOLARSHIPS, given to entering students in memory of the man for whom Carleton is named, are honorary awards in recognition of outstanding qualities of scholarship, character, and promise of achievement.

## Endowed Scholarship Awards

Income from the endowed funds described here provides scholarship assistance to enable qualified students to attend Carleton College. All scholarship recipients must maintain academic excellence and must, unless otherwise noted, demonstrate financial need. Students need not apply for these scholarships directly, they are awarded at the discretion of the College and administered as an integral part of Carleton's financial aid program. The minimum amount currently designated for endowing and administering a new scholarship fund is $\$ 100,000$.

THE ABC-DIVERSITY SCHOLARSHIP was established in 1998 by Ervin and Louise Shames, parents of Allyson Shames Argo '93. This fund is intended to support Carleton students who are successful graduates of the A Better Chance (ABC) secondary school program.

THE GEORGE I. ALDEN SCHOLARSHIP was initiated by the Alden Trust through challenge grants to the College in 1986 and 1989 to support mathematics and science majors. These grants were matched by gifts from several corporate, foundation, and individual donors.

THE CHARLES AND ELLORA ALLISS EDUCATIONAL FOUNDATION, created in 1960 through a bequest from Charles Clifford Alliss, offers scholarship aid to residents of Minnesota.

THE AMANDA B. ANDERSON SCHOLARSHIP FUND was established by Amanda B. Anderson in 1974 to ensure qualified students the opportunity for a superior education in the liberal arts. Miss Anderson was inspired to establish this fund by her association with friends who were Carleton graduates.

THE LESLEY K. ANDERSON '94 MEMORIAL SCHOLARSHIP was established in 2003 by family, friends, and classmates as a memorial to Lesley K. Anderson, Class of 1994, to support students studying psychology.

THE SARA M. ANDERSON FUND was established in 1967 by Sara M. Anderson.
THE ROBERT W., MILDRED S., AND JANE ANDREWS ‘41 MEMORIAL SCHOLARSHIP FUND was established in 1961 in honor of Robert and Mildred Andrews. Their daughter, Jane Andrews, Class of 1941, was a long-time Carleton staff member and dedicated alumni volunteer. When Jane passed away in 1997, the fund expanded to commemorate her life, as well.

THE WALTER G. ANDREWS AND LOUISE SEEGER ANDREWS SCHOLARSHIP was established in 2003 through a bequest from Mr. and Mrs. Andrews, both members of the Class of 1935.

THE LOIS L. ARNEGARD '33 ENDOWED SCHOLARSHIP FUND was created through a bequest in 2001. This scholarship is awarded to first and second year students.

THE RICHARD D. ARNEY ENDOWED SCHOLARSHIP was created in 2005 by the Arney Family to honor the memory of Richard D. Arney, a member of the Carleton Class of 1933 and the successful varsity basketball team of that year. This scholarship provides assistance to Carleton students with financial need, with a preference for students who are members of varsity athletic teams, especially those who play varsity basketball.

THE S. EUGENE BAILEY INSTRUMENTAL SCHOLARSHIP was established through a bequest in 1997 from S. Eugene Bailey, a member of Carleton's Music faculty from 1946 to 1975. This fund supports students who study and perform on orchestra strings, woodwinds or brass instruments.

THE WINFIELD AND HAROLD BAIRD STUDENT AID FUND was established in 1964 by the Winfield and Harold Baird Foundation in honor of W. Stewart McDonald, Class of 1922 and a trustee of the College from 1951 until his death in 1967.

THE FREDERICK GOODSELL BARROWS SCHOLARSHIP FUND was established in 1959 by Frederick Goodsell Barrows, to assist students from Otter Tail County, Minnesota.

THE BAUCUS AND CO. ENDOWED SCHOLARSHIP FUND was established in 1992 by the Holly Beach Public Library Association in Wildwood, New Jersey, and augmented in 1995 by Mrs. Harold J. Fox.

THE LUCILLE H. BECKHART ENDOWED MEMORIAL SCHOLARSHIP FUND was established in 1991 through a bequest from Maurice H. Beckhart in memory of his wife Lucille H. Beckhart, Class of 1927.

THE HAROLD P. BEND SCHOLARSHIP FUND was established in 1965 by Mr. and Mrs. Harold P. Bend.

THE BENOIT FAMILY SCHOLARSHIP was established in 2004 by Madeline Benoit, a Carleton parent and grandparent.

THE MARY LATHROP BENTON SCHOLARSHIP FUND was established in 1978 by Dr. Evelyn Anderson Haymaker, Class of 1921, and her husband Dr. Webb Haymaker in memory of Dr. Mary Lathrop Benton, Dean of Women and Professor of French and Latin from 1914 to 1922.

THE ROBERT R. AND JOSEPHINE F. BERG '47 SCHOLARSHIP was established in 2007 with a generous gift from Mrs. Berg, a member of the Class of 1947. Robert Berg attended Carleton in the early 1940s and did meteorology training on campus during World War II.

THE MARK H. BERMAN ENDOWED SCHOLARSHIP FUND was established in 1999 as a memorial to Mark Berman, Class of 1991, by his family and friends.

THE F. R. BIGELOW FOUNDATION MINORITY SCHOLARSHIP FUND was established in 1985 through a gift from the F. R. Bigelow Foundation of St. Paul, Minnesota, to assist minority students from Ramsey, Washington, and Dakota Counties of Minnesota.

THE VIRGINIA MCKNIGHT BINGER SCHOLARSHIP was established in 1974 by the McKnight Foundation.

THE LUCETTA O. BISSELL MEMORIAL SCHOLARSHIP was established in 1969 through a bequest from Lucetta O. Bissell, Class of 1909, to assist students in the sciences and sociology.

THE ROBERT AND BARBARA BONNER SCHOLARSHIP FUND was established in 2000 by Roy S. Rogers IV, Class of 1989. The fund recognizes Robert's service to Carleton as a member of the History Department and Dean of Students and Barbara's service to both the Carleton and Northfield communities. The fund also serves as a memorial to Jennifer Bonner, Class of 1989. The Bonner Fund provides scholarship aid to students interested in the humanities.

THE BOSWELL SCHOLARSHIP FUND was established in 1875 by Charles M. Boswell.
THE ELIZABETH S. BOYLES SCHOLARSHIP IN MUSIC was established in 1964 through a bequest from her husband, Charles D. Boyles, to assist students in any field of music.

THE PROFESSOR VIOLETTE BROWNE MEMORIAL SCHOLARSHIP was established through a bequest from Robert L. Currie '44 in 2001. This scholarship supports students studying music, with a preference for voice students.

THE DAVID BRYN-JONES SCHOLARSHIP FUND was established in 1964 by Mr. and Mrs. Edward C. Wilson in honor of Dr. David Bryn-Jones, Professor of Economics and Political Science at Carleton from 1920 to 1927 and the Frank B. Kellogg Professor of International Relations from 1936 to 1952. The fund, augmented by family and friends, provides scholarship aid to students interested in the humanities and social sciences in general and in international relations in particular.

THE MARIAN BRYN-JONES SCHOLARSHIP FUND FOR MINORITY STUDENTS was established in 1985 by Marian Bryn-Jones, Class of 1923, to assist minority students.

THE BELLE CALDWELL SCHOLARSHIP FUND was established through a bequest from Mary Louise Caldwell, to provide assistance for junior or senior students.

THE CAMPUS ENDOWED SCHOLARSHIP FUND was established in 1997 during the Assuring Excellence Campaign through the generosity of many members of Carleton's faculty and staff.

THE DAVID L. CANMANN '36 ENDOWED SCHOLARSHIP was established in 2006 by the Canmann family in memory of David L. Canmann '36. The fund provides scholarship aid to Carleton students with demonstrated financial need and a record of academic excellence majoring in economics.

THE HAROLD G. AND ROBERT C. CANT MEMORIAL SCHOLARSHIP FUND was established in 1974 through a bequest from Harold G. Cant, a Minneapolis attorney and a long time friend of Carleton. When Robert passed away in 1999, the memorial scholarship expanded to commemorate his life as well.

THE LOIS CAREY MEMORIAL MUSIC FUND was established in 1991 by family and friends in memory of Lois Utzinger Carey, Class of 1948, to assist students with music lessons, preferably students of stringed instruments, piano or voice, or for the purchase of music.

THE ARNOLD W. CARLSON ' $\mathbf{5 2}$ MEMORIAL SCHOLARSHIP was established in 2001 by Barbara Gray Koch, Class of 1952, in memory of her very close friend and classmate.

THE WENDELL RAMBERG CARLSON FUND was established in 1955 by Anna Carlson Hall, Class of 1910, as a memorial to her brother who died in 1915 while attending Carleton. This scholarship is awarded to male students of unusual promise.

THE CAROLYN SCHOLARSHIP FUND was established in 1969 by the Carolyn Foundation, to provide financial assistance to minority students.

THE PATRICIA D. AND GEORGE L. CASSAT SCHOLARSHIP was established in 2008 to provide scholarship aid to international and domestic students with demonstrated financial need. The scholarship is named for Patricia Donnell Cassat and George L. Cassat, members of the class of 1946 and Carleton parents who have provided extraordinary support for the College.

THE FRANCES AND ROSE CAWARD MEMORIAL FUND was established through a bequest from Neil G. Caward, Class of 1906, in tribute to his wife and his mother.

THE LAURENA CHOO MEMORIAL FUND FOR STUDIES IN ASIA was established in 1992 by Kwan and Jessica Choo in memory of their daughter Laurena Choo, Class of 1990, to support students who are studying in China or in other parts of East or Southeast Asia.

THE CHRISTIAN HIGHER EDUCATION SCHOLARSHIP FUND was established in 1962 by the United Church Board for Homeland Ministries, to assist students who intend to pursue studies related to religion.

THE CLASS OF 1929 SCHOLARSHIP FUND was established by gifts from members of the class on the 55th anniversary of their graduation from Carleton.

THE CLASS OF 1931 SCHOLARSHIP FUND was established by gifts from members of the class on the 50th anniversary of their graduation from Carleton.

THE CLASS OF 1933 SCHOLARSHIP FUND was established by gifts from members of the class on the 50th anniversary of their graduation from Carleton.

THE CLASS OF 1934 SCHOLARSHIP FUND was established by gifts from members of the class on the 50th anniversary of their graduation from Carleton.

THE CLASS OF 1937 SCHOLARSHIP FUND was established by gifts from members of the class.
THE CLASS OF 1944 SCHOLARSHIP FUND was established by gifts from members of the class on its 50th anniversary. Income from the fund will provide four-year scholarships for students who demonstrate qualities of imagination, diversity of talents, self-reliance, creativity, integrity, good citizenship and a strong sense of community. They will be known as Class of 1944 Scholars.

In appreciation for their generous 50th Reunion gift, the College established THE CLASS OF 1950 SCHOLARS. The scholarship is awarded to junior or senior Carleton students with financial need.

THE CLASS OF 1953 ENDOWED SCHOLARSHIP FUND was established by gifts from members of the class on the 50th anniversary of their graduation from Carleton.

THE CLASS OF 1954 ENDOWED SCHOLARSHIP FUND was established by gifts from members of the class on the 50th anniversary of their graduation from Carleton.

## THE CLASS OF 1956 SCHOLARSHIP ENDOWMENT FOR STUDENTS STUDYING

ABROAD was created in 2006 by the Class of 1956 on the occasion of their 50th Reunion. The fund provides scholarships to Carleton students who are pursuing off-campus studies in locations outside of the United States.

THE ' 62 SCHOLARS FUND was established by gifts from members of the class at its 25 th reunion to support students whom the class hopes will reflect the diversity of interests, the enthusiasm for life, and the commitment to others and to Carleton that exemplify the Class of 1962.

## THE CLASS OF 1966 DIVERSITY OF ACHIEVEMENT SCHOLARSHIP AWARD was

 established by gifts from the members of the class on the 25th anniversary of their graduation from Carleton. The scholarship is awarded to students who have made a unique contribution to the college or the community in diverse areas such as the arts, community service, student government, academic research, or other areas of contribution.THE CLASS OF 1968 SCHOLARSHIP FUND was established by gifts from members of the class on its 25th anniversary and in memory of seventeen classmates.

THE BRUCE W. COLWELL SCHOLARSHIP was established in 2009 to support students with financial need from non-urban areas with preference given to first-generation college students.

THE HOWARD CONN FUND was established anonymously in 1960 to honor the Reverend Dr. Howard Conn, a Carleton trustee from 1948 to 1972 and Trustee Emeritus since 1972, for the benefit, preferably, of students preparing for the missionary field.

THE DONALD J. AND ELIZABETH S. COWLING FUND was established in 1945 by friends of Carleton in honor of its third president, Donald J. Cowling, who served from 1909 to 1945, and his wife Elizabeth. Income from the fund is used to meet the financial need of minority students with "outstanding potential for success at Carleton and leadership in the nation and the world."

THE ELIZABETH REINHART CRABTREE SCHOLARSHIP was established in 2009 through a gift from the estate of Elizabeth Reinhart Crabtree, Class of 1942. The fund provides assistance for students with financial need who are residents of Florida at the time of their matriculation

THE JENNIE NASON CROOKER MEMORIAL SCHOLARSHIP FUND was established in 1978 by Harold N. Crooker, Class of 1918, as a memorial to his mother. Income from the fund provides scholarship assistance to women, preferably daughters of the clergy or missionaries.

THE THOMAS M. CROSBY SR. FUND FOR MINORITY STUDENTS was established in 1988 through a bequest from Thomas M. Crosby, a trustee of the College from 1973 until his death in 1988.

THE WILLIAM D. CROTTY SCHOLARSHIP FUND was established in 1987 through a bequest from William D. Crotty.

THE CHARLES A. CULVER SCHOLARSHIP FUND FOR PHYSICS was established in 1965 with a gift from Dr. Culver, Class of 1902, Professor of Physics from 1923 through 1946 and Professor of Mathematics in 1947, to assist students who intend to pursue the study of physics as a life career.

THE CUSTODIAL SCHOLARSHIP FUND was established in 1993 by members of Carleton's custodial staff to assist students with financial need with preference given to the children of custodians.

THE DAIMLER CHRYSLER CORPORATION SCHOLARSHIP FUND was established in 1971 for qualified students who could not afford to attend Carleton College without financial aid.

THE PATRICIA V. DAMON '36 SCHOLARSHIP FUND was created in 2003 by a bequest from the estate of Ms. Damon. This fund provides scholarship aid to senior Carleton students who exhibit a strong academic profile and accomplishment in extra-curricular activities.

THE CARRIE AND JAMES DAVIS SCHOLARSHIP FUND was created in 2006 by Stephen J. Davis, Class of 1988, and Christopher J. Davis, Class of 1989, to honor their parents. The scholarship provides aid to students of color with preference given to African American students.

THE DEKKO SCHOLARSHIP was established in 2008 by Jeffrey Dekko ' 88 and Christine Rhodes Dekko '87 to provide scholarship aid to students with demonstrated financial need.

THE EDWIN DICKINSON SCHOLARSHIP FUND was established in 1979 through a bequest from Mrs. Edwin D. Dickinson, Class of 1909, in memory of her husband, also a 1909 graduate.

THE DIPLOMATS ENDOWED SCHOLARSHIP FUND was established by an anonymous donor in 2004. The fund provides financial assistance to students who have taken at least one course in international relations.

THE LOUIS L. DODGE FUND was established in 1936 by Mattie Chapman Dodge as a memorial to her husband.

THE CHARLES AND BERTHANIA DONNELLY SCHOLARSHIP FUND was established in 1970 with a gift from their estate.

THE JOYCE P. AND DAVID F. DRAKE SCHOLARSHIP FUND was established in 2008 by Joyce and David Drake in celebration of their 50th reunion. Both members of the Class of 1958 and Northfield natives, they wish to extend the opportunity of a Carleton education to young men and women with financial need from their hometown and the surrounding area.

THE DR. AND MRS. HILLIARD DUBROW ENDOWED STUDENT TRAVEL FUND was established in 2010 by Heather Dubrow to support student travel for off-campus studies programs. In creating this fund, Ms. Dubrow honors her parents' respect for education, travel, and the many connections between the two, and expresses her gratitude for their support in both areas.

THE NEIL S. DUNGAY MEMORIAL FUND was established in 1959 by friends of Dr. Dungay, a Carleton professor for 45 years, to assist pre-medicine and other science students.

THE PHILIP R. DUNTON SCHOLARSHIP FUND was established in 1965 with a gift from Philip R. Dunton, to assist students expressing interest in mathematics or the sciences.

THE ROGER L. ELDRIDGE INTERNATIONAL STUDENT SCHOLARSHIP was established in 1992 by Joanne E. Swenson Eldridge, to honor her husband, Roger L. Eldridge, Class of 1955 and College Chaplain from 1962 to 1963.

THE RUDOLPH T. ELSTAD SCHOLARSHIP FUND was established in 1961 by Mrs. Rudolph T. Elstad, Class of 1919, in memory of her husband, a trustee of the College from 1952 to 1959, to assist students studying mathematics, pre-engineering, or science.

THE ARTHUR T. ERICKSON SCHOLARSHIP FUND was established in 1969 through a bequest from the estate of Mr. Erickson, the father of two Carleton students.

THE MARILYN MINAR ERICKSON MUSIC SCHOLARSHIP was established in 1981 to honor Marilyn Minar Erickson, Class of 1949, and her life-long love of music, nurtured while she was a student at the College. Income from the fund is awarded to Carleton students from the Upper Midwest who play a stringed instrument.

THE CLARK D. EVANS SCHOLARSHIP FUND was established in 1987 by the family and friends of Clark D. Evans, Class of 1980. This scholarship is awarded to entering first-year students based on their academic achievement and ability, and is renewed annually, assuming continued scholarship achievement, during the students' four years at Carleton.

THE ROBERT FLANAGAN MEMORIAL SCHOLARSHIP FUND was established in 1974 by friends and associates in memory of Mr. Flanagan. Robert Flanagan served on the Carleton Board of Trustees from 1944 to 1968.

THE FORD MOTOR COMPANY ENDOWED SCHOLARSHIP was established in 1996 to assist students majoring in the physical sciences or mathematics.

## THE WINFIELD A. FOREMAN ENDOWED SCHOLARSHIP FOR ACADEMIC

EXCELLENCE IN ECONOMICS is given to students with a track record of academic excellence majoring in Economics. This scholarship was created in May of 2005 by Winfield Foreman's wife, Alice, in honor of her husband's 90th birthday. Mr. Foreman was a member of the Carleton Class of 1937.

THE ALICE BEAN FRASER SCHOLARSHIP FUND was established in 1975 with a gift from the estate of Alice Bean Fraser, Class of 1900, to assist minority students.

## THE GAMBLE AND SKOGMO FOUNDATION FUND FOR MINORITY STUDENTS was

 established in 1986.THE RUTH HARTZELL GAUMNITZ FUND was established in 1937 by her husband, Carl Gaumnitz, in her memory.

THE GILLETTE-PIKE SCHOLARSHIP FUND was established in 1962 by Mr. and Mrs. Allen W. Pike in memory of James R. Gillette, who served for 15 years at Carleton as professor of music, to assist music students.

THE LAURENCE MCKINLEY GOULD FUND was established in 1952 as a tribute to former Carleton President Laurence McKinley Gould to assist students majoring in science.

THE LAURENCE M. GOULD ENDOWED SCHOLARSHIP FUND was established in 1974 by DeWitt Wallace, founder with Mrs. Wallace of Reader's Digest, to honor his friend, former Carleton President Laurence M. Gould.

THE SPENCER GOULD ' 52 AND BARBARA SHARP GOULD ' 57 ENDOWED
SCHOLARSHIP FUND was established in 2002 by the Class of 1952 in honor of Spencer Gould's 50th reunion and to recognize the exceptional generosity of Spencer and Barbara.

THE PHILIP FARRINGTON GRAY MEMORIAL SCHOLARSHIP FUND was established in 1927 by friends of Mr. Gray, Class of 1928.

THE HAZEL L. AMLAND GROSE SCHOLARSHIP FUND was established in 1975 by Thomas F. Grose in memory of his mother, Hazel Amland Grose, Class of 1922.

THE DR. M. STUART AND MARION BURNETT GROVE ENDOWED SCHOLARSHIP FUND was established in 2007 through a gift from the Groves' estate and memorial gifts made by their family and friends. The fund assists students with financial need.

THE ALICE DAU HAN, R.N., SCHOLARSHIP FUND was established in 1976 through a bequest from her husband, Dr. Maolin Han, Class of 1945, to assist students studying Chinese culture, language, and/or history.

THE MALCOLM B. HANSON MEMORIAL SCHOLARSHIP FUND was established in 1974 by Josephine O. Hanson in honor of her late husband, Malcolm Hanson, Class of 1920, to assist students of Scandinavian descent.

THE JOSEPHINE LOUISE HARPER MEMORIAL SCHOLARSHIP FUND was established in 1926 by Mrs. J. L. Harper as a memorial to her daughter.

THE ADA M. HARRISON ENDOWED SCHOLARSHIP FUND was established in 2000 from Professor Harrison's estate and with memorial gifts from her former students and colleagues. Ada M. Harrison taught economics at Carleton from 1948 until her retirement in 1979.

THE JOSEPHINE NEWTON HART SCHOLARSHIP FUND was established in 1963 by a gift from the estate of Josephine Newton Hart, Class of 1900.

THE WILLIAM RANDOLPH HEARST ENDOWED SCHOLARSHIP FUND was established in 1991 by The Hearst Foundation, Inc. of San Francisco.

THE LUCILLE R. AND PETER F. HEINTZ ENDOWED SCHOLARSHIP FUND was established in 1997 to support students of need with priority given to students from Chickasaw County, Iowa or from other rural areas in Iowa.

THE DOW ZACHARY HELMERICH SCHOLARSHIP FUND was established in 1989 by Walter H. Helmerich, III, to honor his son "Zak" Helmerich, Class of 1980, and to assist students from Oklahoma.

THE PAT AND PAULINE HERMAN SCHOLARSHIP FUND was established in 2001 through a bequest from the Hermans. Preference is given to students from Guam, or specified schools in India or the city of Oak Park, Illinois.

THE ROBERT J. "BOB" HERMECKE AND ARNOLD J. "ARNIE" HILLESTAD ENDOWED SCHOLARSHIP FUND was established in 1999 through an estate gift from Arnold J. Hillestad. This fund supports students studying the piano.

THE JEAN R. AND RICHARD H. HOPPIN SCHOLARSHIP was established in 1986 by Richard H. Hoppin, Class of 1936, to assist students in the Departments of English and Music. One award is made each year and alternates between English and Music majors.

THE GEORGE A. HORMEL AND COMPANY SCHOLARSHIP was established in 1984 to assist students from Austin, Minnesota, and vicinity.

THE A.D. AND M.A. HULINGS '36 MEMORIAL SCHOLARSHIP FUND was created in 1994 by Carleton alumni, faculty, staff, and friends of A.D. "Bill" and M.A. "Betty" Hulings, both from the Class of 1936. Bill and Betty both served as trustees of the College.

THE HUNT SCHOLARS ENDOWED SCHOLARSHIP FUND was established in 1999 with a gift from the estate of Sam E. Hunt. The fund provides financial support for two students of color, one male and one female, who demonstrate deep financial need and have a strong academic record.

THE JAMES AND JOANNE SILL HUNTTING SCHOLARSHIP was established in 2009 by James '50 and Joanne '50 Huntting on the occasion of their 50th reunion. The fund is intended to provide financial aid to students with demonstrated financial need.

THE SARAH B. HYDE SCHOLARSHIP FUND was established in 1897 with a gift from the estate of Sarah B. Hyde.

THE INTERNATIONAL SCHOLARSHIP was created in 2004 through an anonymous gift to broaden access to a Carleton education for talented students from around the world.

THE HORACE HILLS IRVINE SCHOLARSHIP FUND was established in 1958 by Mrs. Irvine in memory of her husband, a Carleton trustee from 1930 to 1947, to assist students majoring in any field of science.

## THE ANDREA GROVE ISEMINGER'59 ENDOWED SCHOLARSHIP FUND FOR OFF-

 CAMPUS STUDIES was created in 2001, honoring Andrea Grove Iseminger and her distinguished service to Carleton. As director of Off-Campus Studies, Ms. Iseminger matured and expanded Carleton's program which has been described as one of the best in the nation. Scholarships provide financial resources each year for off-campus study and travel for students with demonstrated financial need enrolled in Carleton sponsored programs.THE IVES SCHOLARSHIP FUND was established in 1888 by Dr. Charles L. Ives.
THE MILDRED LAURA JAYNES SCHOLARSHIP was established through a bequest from Mildred Laura Jaynes, to assist students in the Physical Education Department.

THE OWEN JENKINS HONORARY SCHOLARSHIP was initiated in 1997 by gifts from alumni, family and friends in honor of Professor Owen Jenkins' 43 years of distinguished service to the College and recognition of his retirement. This fund provides financial assistance for junior or senior English majors who demonstrate financial need. Of the English majors demonstrating need, the one with the highest grade point average will receive support from the Jenkins Fund.

THE JAMES EDWIN JENKS SCHOLARSHIP FUND was established in 1972 through a bequest from Marion S. Jenks in memory of her husband James, Class of 1895, to assist male students with financial need.

THE LOWELL E. AND ADA WHITING JEPSON SCHOLARSHIP FUND was established in 1981 by Katharine Jepson Jackson, Class of 1914, in memory of her parents, Ada Whiting Jepson, Class of 1888, and Lowell Jepson, Class of 1887 and a Carleton trustee from 1898 to 1938.

THE LYDIA M. JEWETT SCHOLARSHIP FUND was established in 1881 with a gift from the estate of Lydia M. Jewett to support daughters of clergyman.

THE ROSALIND GESNER JOHNSON '54 MEMORIAL ENDOWED SCHOLARSHIP FUND was established in 2001 in anticipation of the Class of 1954's 50th Reunion by Louise Heffelfinger. This fund recognizes her close friend and classmate, Rosie Johnson.

THE JOYCE FOUNDATION SCHOLARSHIP FUND was established in 1983 to assist minority students at Carleton.

THE LYDIA S. AND CLARENCE E. TILLBERG AND JEROME J. AND LORRAINE T. KAPITANOFF SCHOLARSHIP FUND was established in 2005 with a gift from the estate of Lorraine Tillman Kapitanoff, Class of 1939.

THE KAUTZ FAMILY ENDOWED SCHOLARSHIP was established in 2008 with a gift from the Kautz Family Foundation to honor Leslie Barnes Kautz '80 and the excellent liberal arts education she received at Carleton. The fund assists students with financial need, with preference for first generation college students.

THE FRANK B. KELLOGG FOUNDATION SCHOLARSHIP FUND was established in 1937 by Senator and Secretary of State Frank B. Kellogg, to assist students with an interest in international relations and the study of other governments and cultural groups.

THE FRED C. AND BEATRICE E. KENNEDY GEOLOGY FUND was established in 1998 by Mr. Kennedy. The fund supports student scholarships and the maintenance of the rare mineral species collection donated by Mr. Kennedy.

THE WALTER AND CAROLYN KERN FUND was established in 1944 through a bequest from Walter Kern, whose wife Carolyn Evans Kern graduated in 1900.

THE HAROLD P. KLUG MUSIC SCHOLARSHIP was established in 1994 through a bequest from Mr. Klug to support students interested in music.

THE WARREN P. KNOWLES ENDOWED SCHOLARSHIP FUND was established in 1994 through a bequest from Mr. Knowles, Class of 1930 and former Governor of Wisconsin. Income from the fund assists students who have completed their first year and are going to complete their education at Carleton.

THE KUEFFNER ENDOWED SCHOLARSHIP FUND was established in 2000 by Mary-Hill French, Class of 1938, and William R. Kueffner, Class of 1941, in honor of their parents, Helen S. and William Ruesch Kueffner.

THE GEORGE H. LAMSON ENDOWED SCHOLARSHIP FOR INTERNATIONAL
STUDENTS was established in 2003 with gifts from friends, family, alumni, and colleagues of Professor Lamson to honor his 33 years of distinguished service to the College.

THE CLAIRE SCHMUCKEL LANDAU '37 ENDOWED SCHOLARSHIP was established in 2002 by Richard and Claire Landau to support students studying music.

THE ELIZABETH J. LARIMORE AND MAUDE I. MATHEWS MEMORIAL FUND was established in 1965 through a bequest from Elizabeth J. Larimore as a memorial to Elizabeth J. Larimore, Class of 1893, and her sister Maude I. Mathews, Class of 1895.

THE ROBERT F. LEACH MEMORIAL SCHOLARSHIP FUND was established in 1971 by friends and associates of Robert F. Leach, Class of 1931 and a Carleton trustee from 1960 to 1970.

THE RALPH N. LEUTHOLD SCHOLARSHIP FUND was established in 1961 to assist deserving students, preferably from southern Minnesota.

THE HAZEL M. LEWIS MEMORIAL SCHOLARSHIP FUND was established in 1962 by her family and friends in memory of Hazel M. Lewis, Dean of Women from 1943 to 1958.

THE MARY ELLEN LEWIS ‘28 SCHOLARSHIP FUND was established in 1998 through a bequest from Mary Ellen Lewis.

THE MIRIAM LOSS LEWY ‘44 SCHOLARSHIP was created in 1996 as a tribute to Mrs. Lewy.
THE DR. AND MRS. HYME LOSS SCHOLARSHIP FUND was established in 1975 by Adith Loss Miller, Class of 1939, and her husband Benjamin, to honor Mrs. Miller's parents. Dr. Hyme Loss taught at Carleton from 1926 to 1955 and was chairman of the Department of Romance Languages from 1942 until his retirement.

THE FRANCES P. LUCAS SCHOLARSHIP FUND was established in 1975 by Frances P. Lucas, wife of Ward Lucas, Carleton trustee from 1941 to 1961. Income from the fund is awarded, when possible, to students who are residents of Winona County, Minnesota.

THE WARD LUCAS SCHOLARSHIP FUND was established in 1956 by Frances P. Lucas as a memorial to her husband Ward, a Carleton trustee from 1941 to 1961.

THE RALPH B. AND NANCY LYNN SCHOLARSHIP FUND was established in 1984 by Ralph B. Lynn, Class of 1932, and his wife Nancy.

THE JACKY TRAGER MAGUIRE SCHOLARSHIP IN ENGLISH LITERATURE was established in 1994 by family and friends as a memorial to Jacquelyn Marie Trager Maguire, Class of 1947, to assist students studying English Literature.

THE JOHN W. MAHAN MEMORIAL FUND was established in 1957 through bequests from his wife Hortense B. Mahan and daughter Marjorie E. Mahan, Class of 1921, to assist students, preferably from St. Paul and suburbs.

THE JOE AND DONNA MARKLEY SCHOLARSHIP FUND was established in 1979 by Joseph H. Markley, Class of 1917, and Donna Rosebrock Markley, Class of 1919.

THE MARJORIE MARSHALL SCHOLARSHIP FUND was established by Irl H. Marshall in honor of his daughter, Class of 1951.

THE MARYHILL ENDOWED SCHOLARSHIP FUND was established in 2007 by Mary F. Carson and K. Paul Carson, Jr., parents of three Carleton graduates.

THE JAMES C. MASSON SCHOLARSHIP FUND was established in 1976 through a bequest from Dr. James C. Masson.

THE PHILIP A. McADAM SCHOLARHSIP FUND was established in 1959 by the parents of Philip McAdam ' 41 who was killed in action during WWII. The fund assists students with financial need.

THE McDONALD SCHOLARSHIP FUND was established in 1964 to honor the memory of Willis James and Isabelle Stewart McDonald, K. J. McDonald, Class of 1920, and W. Stewart McDonald, Class of 1922 and a trustee of the College from 1951 to 1967.

THE McKNIGHT FOUNDATION ENDOWED SCHOLARSHIP FUND was established in 1975 to assist minority students.

THE MEAD WITTER FOUNDATION ENDOWED SCHOLARSHIP FUND was established in 2004 for Carleton students from Wisconsin.

THE CHARLES E. MERRILL SCHOLARSHIP FUND was established with gifts in 1960 and 1968 from the Charles E. Merrill Trust, to assist students from small mid-western towns.

THE CHARLES E. MERRILL SCHOLARSHIPS were established in 1977 to assist students from small communities in Minnesota, Iowa, North and South Dakota, and Wisconsin.

THE GEORGE AND RUTH MESTJIAN SCHOLARSHIP FUND was established in 2008 through a gift from the Mestjians' estate to support students with financial need who have "struggled mightily to help themselves."

THE JOHN M. AND MINNIE S. MILLEN MEMORIAL SCHOLARSHIP FUND was established in 1931 by friends of Mr. Millen. Mr. Millen was a track coach at Carleton in the 1920s. The name of the scholarship was changed in 1997 to include Mrs. Millen's name.

THE ADITH LOSS MILLER ‘39 MEMORIAL SCHOLARSHIP was established in 1998 by Benjamin A. Miller in loving memory of his wife Adith.

THE ALLICE ARCHIBALD MINOR AND JOEL P. HEATWOLE FUND was created by combining two separate funds in 1965 as a memorial to Allice Archibald Minor, to assist students who are graduates of Northfield High School or residents of Northfield and vicinity.

THE WILLARD WHITCOMB MORSE MEMORIAL FUND FOR CARLETON COLLEGE was established in 1961 by the Morse Foundation of Minneapolis, Minnesota, as a memorial to Willard Morse, to assist students studying English and/or history.

THE CHARLES A. MOSES '49 ENDOWED SCHOLARSHIP was established in 2002 with a bequest from Mr. Moses' estate. Preference is given to students intending to major in economics.

THE MULTICULTURAL ALUMNI NETWORK (MCAN) SCHOLARSHIP was created in 1999 by Carleton alumni, faculty, staff, and friends to provide scholarship aid to Carleton students of color.

THE LAURA JANE MUSSER ENDOWED SCHOLARSHIP FUND was established in 1992 by the trustees of The Musser Fund in memory of Laura Jane Musser to provide aid to students of color with demonstrated financial need.

THE ROBERT EATON NASON MEMORIAL SCHOLARSHIP FUND was established in 1931 as a memorial to Robert E. Nason, Class of 1931.

THE EARL A. NEIL '57 ENDOWED SCHOLARSHIP was created in 2005 by Phillip G. Schmid '57 and Joanne M. Schmid P'84 to honor Phil's friend and classmate, Earl A. Neil '57. This fund provides scholarship aid to Carleton students with demonstrated financial need, with a preference given to students from minority or traditionally disadvantaged backgrounds.

THE ANN NICOLE NELSON '93 MEMORIAL SCHOLARSHIP FUND was established in 2003 to honor the memory of Ann Nelson, Class of 1993, who lost her life in the World Trade Center on September 11, 2001.

THE MABEL HUNTOON NELSON FUND was established in 1966 through a bequest from Mabel H. Nelson, Class of 1915, to assist talented music students.

THE MALCOLM J. NELSON SCHOLARSHIP FUND was established in 1997 by Robert W. Nelson, Class of 1962, and Carolyn Williamson Nelson, Class of 1963, in memory of Robert's father, Malcolm J. Nelson. The scholarship is awarded to students from rural areas or small towns in Minnesota with preference given to students from the counties of Otter Tail or Mahnomen.

THE ERNEST AND EDNA NEWHOUSE ENDOWED SCHOLARSHIP FUND was established in 2005 from the estate of Mr. Newhouse, Class of 1935.

THE NORTHWEST PAPER FOUNDATION SCHOLARSHIP FUND was established in 1969 by the Northwest Paper Foundation.

THE LAVERNE NOYES FOUNDATION SCHOLARSHIP FUND was established in 1937 by the trustees of the estate of LaVerne Noyes, to assist students who are descended from veterans of World War I.

THE MARY JUSTINE OENNING ‘28 MEMORIAL SCHOLARSHIP was established in 1998 through a bequest from Mary Oenning's estate.

THE OGDEN-WILKINSON SCHOLARSHIP FUND was established in 1980 by J. Humphrey Wilkinson, Class of 1916, and by gifts from Dr. Warner Ogden, Class of 1916, and his son Dr. Harry S. Ogden, Class of 1945, in honor of J. Humphrey Wilkinson and his classmate and friend, Dr. Warner Ogden.

THE ANN ELIZABETH OLIVER SCHOLARSHIP was established in 1993 by Julia and Gay Oliver and the Borg Warner Foundation in memory of the Olivers' daughter Ann, Class of 1994, who died of cancer.

THE OSCAR AND MAUDE OLSON SCHOLARSHIP FUND was established in 1984 by a bequest from their daughter Helen K. Dundas, Class of 1926, to assist women students, preferably those interested in a business career.

THE ROBERT J. OWENS '66 ENDOWED SCHOLARSHIP was established in 2009 by Robert J. Owens, Class of 1966, and is awarded to students with financial need.

THE J. FALCONER PATERSON AND KATHERINE K. PATERSON SCHOLARSHIP FUND was established in 1996 through a bequest from the Patersons. Assistance is awarded to students demonstrating financial need with preference given to students interested in optometry.

THE BOWMAN W. PATTEN SCHOLARSHIP FUND was established in 1944 in memory of Bowman W. Patten, a friend of the College, to assist a senior planning to study for the ministry.

THE CAROLINE F. PEINE ‘47 ENDOWED SCHOLARSHIP was established in 1997 by Caroline F. Peine, to assist students from Kansas.

THE JESSE F. PERRIN SCHOLARSHIP FUND was established in 1971 by Homer Surbeck in honor of his boyhood friend, Reverend Jesse Perrin, Class of 1925.

THE CLIFTON E. PETERSON, M.D. '50 SCHOLARSHIP FUND was established by Dr. Peterson in 2001 to assist students from the Iowa counties of Franklin, Hancock, and Wright, and the Wisconsin counties of Ozaukee and Polk.

THE PROFESSOR JOHN PHELAN MEMORIAL SCHOLARSHIP was established through a bequest from Robert L. Currie ' 44 in 2001. Professor Phelan taught sociology and anthropology at Carleton from 1932 until 1950. This scholarship assists students studying sociology or social work.

THE PILLSBURY COMPANY SCHOLARSHIP was established in 1985 by the Company as part of the College's scholarship endowment for minority students.

THE PRENTISS SCHOLARSHIP FUND was established in 1934 by the board of trustees of the Prentiss estate as a memorial to Mr. and Mrs. Samuel Prentiss (Maud Laird), in acknowledgment of their long interest in Carleton.

THE NICHOLAS '37 AND VIRGINIA G. PUZAK ENDOWED SCHOLARSHIP FUND was established in 1999 and is awarded to students who graduate from high schools in Minnesota.

THE WILLIAM HERMAN QUIRMBACH SCHOLARSHIP FUND was established in 1985 by relatives and friends of William Herman Quirmbach, to assist students of high academic achievement who participate in the extracurricular life of the College.

THE EBENEZER G. RANNEY SCHOLARSHIP FUND was established in 1926 by Ebenezer G. Ranney.

THE READER'S DIGEST FOUNDATION SCHOLARSHIP FUND was established in 1965.

THE RELIASTAR SCHOLARSHIP FUND was established in 1997 by the Minnesota-based ReliaStar Foundation. Scholarship assistance is awarded to juniors or seniors majoring in economics, mathematics, computer science, or related fields.

THE REMEMBRANCE OF WAR, PURSUIT OF PEACE SCHOLARSHIP was established in 1995 by gifts from members of the Class of 1945 on the 50th anniversary of their graduation from Carleton. Their scholarship fund supports two scholarships, one for a junior and one for a senior student, in hope that their education will have some impact on the world's search for peace.

THE EDITH GARRISON REYNOLDS ENDOWED SCHOLARSHIP FUND was established in 1992 through a bequest from Edith Garrison Reynolds, Class of 1932.

THE C. EUGENE RIGGS SCHOLARSHIP FUND was established in 1972 by C. Eugene Riggs.
THE MABEL E. P. RIGGS FUND was established in 1946 by her husband C. E. Riggs to assist students with demonstrated need, preferably female students.

THE JESSE SQUIBB ROBINSON SCHOLARSHIP IN ECONOMICS was established in 1977 by Freda Dungay Robinson in memory of her husband Jesse, a member of the economics department from 1920 to 1953, to assist students studying economics.

THE RICHARD AND ELIZABETH RODGERS ENDOWED SCHOLARSHIP FUND was established in 1996 through an estate gift of Richard S. Rodgers, Class of 1926, to support upper class students with financial need during their final two years at Carleton.

THE JANET VIEREGG ROSSOW '59 MEMORIAL SCHOLARSHIP was established in 1995 by her husband Edwin Rossow, '59 to recognize and perpetuate within the Carleton community the spirit of the love of art that was central in Janet's life. This scholarship is awarded to a senior Studio Art or Art History major with good academic standing, demonstrated financial need, and who best exemplifies Janet's love of art and her commitment to enrich the lives of members of her local community.

THE VICTORIA ANN RUPP '66 ENDOWED SCHOLARSHIP FUND was established in 2007 with a gift from Victoria Ann Rupp, Class of 1966 and long time member of the Carleton Alumni Adventures Travel Committee and the Alumni Council.

THE CHARLOTTE M. SANFORD SCHOLARSHIP FOUNDATION was established in 1993 through a bequest from Charlotte Mead Sanford of St. Paul to provide financial aid for deserving music, art, and modern language students. Ms. Sanford did not attend Carleton, but some of her closest friends were alumni and staff.

THE SCHOLARSHIP FOR INTERNATIONAL STUDENTS was established by an anonymous donor in 2004 to provide financial support for international students enrolled at Carleton.

THE DONALDA D. SCHNEIDT SCHOLARSHIP FUND was established in 1970 through a bequest from Donalda D. Ludwig Schneidt, Class of 1906.

THE LOUISE E. SCHUTZ SCHOLARSHIP FUND was established in 1966 through a bequest from Louise E. Schutz, Class of 1907.

THE HIRAM ARTHUR SCRIVER FUND was established in 1944 by the Arthur T. Scriver family in memory of Hiram Arthur Scriver, Class of 1881 and a trustee of the College from 1900 to 1922, and his grandson, also Hiram Arthur Scriver, Class of 1943.

THE WILLIAM H., MARY L., AND M. LEITH SHACKEL SCHOLARSHIP FUND was created in 1955 by Leith Shackel, Class of 1929 and former Director of Placement and Dean of Women at Carleton, as a memorial to her parents. When Leith passed away in 1996, the memorial scholarship expanded to commemorate her life, as well.

THE SHELDAHL - JAMES S. WOMACK ENDOWED SCHOLARSHIP FUND was established in 1992 by Sheldahl Incorporated to honor retiree James S. Womack whose career at Sheldahl spanned 35 years. Mr. Womack had a strong commitment to the Northfield community and to Carleton College.

THE MICHAEL T. SHELTON '79 SCHOLARSHIP FUND was established in 1998 through a bequest from Michael T. Shelton to assist senior students who have a proven record of helping others and exhibit a good sense of humor.

THE BEVERLY OYLER SHIVERS '56 OFF-CAMPUS STUDY FUND was created in 1998 to support students who are attending a Carleton sponsored off-campus program in France or in Frenchspeaking countries.

THE PROFESSOR ROSS SHOGER SCHOLARSHIP was established in 2007 by Professor Shoger and his wife, Jan, to assist students with financial need, with preference to students participating in Carleton's pre-medical program.

THE DR. A. E. AND RUTH SIMONSON SCHOLARSHIP FUND was established in 1971 through a bequest from Dr. A. E. Simonson in memory of his wife Ruth, Class of 1917, to assist students, preferably graduates of Pelican Rapids (Minnesota) High School.

THE FRED G. SIMONTON ENDOWED SCHOLARSHIP FUND was established in 1986 with gifts received in memory of Fred G. Simonton. Students with a rural or small community background from the states of Montana, Wyoming, Colorado, Kansas, Nebraska, North Dakota, South Dakota, Minnesota, and Iowa will receive priority.

THE SKILLMAN FOUNDATION SCHOLARSHIP was established in 1975 by The Skillman Foundation in honor of Mrs. Robert H. Skillman.

THE NATALIE TOWERS SLACK SCHOLARSHIP FUND was established in 1966 by Ralph Towers, in honor of his daughter Natalie, Class of 1956, to assist students interested in music.

THE SLOCUM FUND was established in 1984 by members of the Slocum family, to assist deserving students, preferably female students from southwestern Minnesota.

THE CHARLES L. SMITH, JR. SCHOLARSHIP was established in 1985 by Mr. Smith, a Carleton parent and past trustee, as part of the College's scholarship endowment for minority students.

THE GEORGE T. SOMERO MEMORIAL SCHOLARSHIP FUND was established in 1972 by his wife Mary E. Somero and his son and daughter-in-law, Dr. George N. Somero, Class of 1962, and Dr. Meredith C. Somero, in honor of George T. Somero. First preference will be given to students from Ely, Minnesota, and a secondary preference to Minnesota students from schools located within 100 miles of Ely.

THE BIRUTA K. SOMMER SCHOLARSHIP FUND was established in 1975 through a bequest from Biruta K. Sommer, a friend of the College, to assist students studying German literature.

THE KELLEY SRIVER ENDOWED SCHOLARSHIP was created in 2005 by Christina Kelley Sriver '93 and Joe Kelley Sriver. Preference for these awards will be given to students who participate in or are eligible for the TRIO/SSS program.

THE C.V. STARR SCHOLARSHIP FUND was established in 1987 to provide financial assistance to students connected with the Asian Studies Program.

THE NORMAN A. AND BETSY BULLIS STERRIE ENDOWED SCHOLARSHIP FUND was established in 2002 by Mr. and Mrs. Sterrie with the hope that they could help future Carleton students as they were helped when they were students at Carleton in 1939.

THE WILLIAM W. STOUT FUND was founded in 1959 through a bequest from William W. Stout.
THE SURDNA FOUNDATION SCHOLARSHIP was established in 1985 to assist minority students.

THE SWEITZER FAMILY SCHOLARSHIP was established in 2008 by Caesar F. '72 and Peggy A. Salagovic '71 Sweitzer to provide financial aid to students with demonstrated need. Preference is given to first generation college students.

THE THURLO B. THOMAS SCHOLARSHIP FUND was established in 1972 by former students and friends of Dr. Thurlo B. Thomas, Professor of Zoology for 27 years. This fund assists students majoring in biology, preferably those who intend to pursue medicine as a career.

THE JAMES R. THORPE ENDOWED SCHOLARSHIP FUND was established through a bequest from James R. Thorpe, to assist students from Minnesota or the Upper Midwest (North Dakota, South Dakota, Iowa, and Wisconsin).

## THE CAROLYN KLEPFER AND THOMAS OLIVER THORSEN '53 ENDOWED

SCHOLARSHIP was established in 2003 through the estate of Thomas O. Thorsen, Class of 1953. Preference for awards from this fund will be given to students from the Brainerd Lakes area with an interest in economics or to students majoring in economics.

THE GRETCHEN KAISERMAN TRAGER SCHOLARSHIP FUND was established in 1991 by Jacquelyn Trager Maguire, Class of 1947, and her husband Walter as a memorial to Jacquelyn's mother Gretchen Kaiserman Trager, Class of 1918, to assist music majors.

THE U.S. BANK SCHOLARSHIP FUND (formerly The First National Bank of St. Paul Scholarship Fund) was established in 1969 by the board of directors of the bank.

THE F. KEITH UNDERBRINK FUND FOR GLOBAL INITIATIVES was established with gifts from the estate of F. Keith Underbrink, a member of the Carleton Class of 1956. The Underbrink Fund for Global Initiatives supports the Underbrink Scholarship, which provides financial aid to international students.

THE ADDIE BIXBY UPHAM FUND was established in 1935 through a bequest from Warren Upham as a memorial to his wife, to provide assistance to students with rural backgrounds.

THE CORNELIA F. AND FRANCES O. VAIL ENDOWED MUSIC SCHOLARSHIP was established in 2003 by Judson F. Harmon, class of 1956. Mr. Harmon created this fund as a tribute to his grandmother, Cornelia Vail, and his aunt, Frances O. Vail, Carleton Class of 1923. The scholarship provides assistance to students studying music.

THE ELIZABETH WARREN AND FRANCES R. WARREN SCHOLARSHIP FUND was established in 1993 through a bequest from Frances R. Warren, Class of 1931, to assist worthy students with demonstrated financial need-students less fortunate than Frances and her sister Elizabeth Warren, Class of 1925.

THE WILLIAM W. WATSON MEMORIAL FUND was established in 1955 by Dr. Percy T. Watson, Class of 1903, and Mrs. Watson (Clara French), Class of 1903, as a memorial.

THE DR. ARTHUR WEILAND FUND was established in 1982 as a memorial to Dr. Arthur Weiland, Class of 1917.

THE FLORENCE RICE WELLMAN SCHOLARSHIP FUND was established in 1974 through a bequest from Florence R. Wellman, Class of 1908, to assist students studying chemistry or music.

THE MAY CRAVATH WHARTON FUND was established in 1960 through a bequest from William B. Cravath as a memorial to his sister, Dr. May Cravath Wharton, Class of 1894.

THE DAVID WHITCOMB SCHOLARSHIP FUND was established in 1887 by David Whitcomb to assist female students.

THE ELLEN M. WHITCOMB SCHOLARSHIP FUND was established in 1888 by David Whitcomb, in memory of his daughter Ellen, to assist children of missionaries and clergymen.

THE CHARLOTTE WILLARD SCHOLARSHIP FUND was established in 1959 through a bequest from Nellie Gregg Hurst, Class of 1898, in honor of Charlotte Willard, a former faculty member.

THE WINONA SCHOLARSHIP FUND was established by Mrs. Frances Laird Bell in 1917, to assist students from Winona County, Minnesota.

THE FRANK L. AND JOY G. WOLF ENDOWED SCHOLARSHIP FUND was established in 2000 by Joy G. Wolf, along with family, friends, and colleagues to honor Frank's memory. Professor Wolf taught mathematics at Carleton from 1952 until his retirement in 1989. Students from Crow Wing, Aitkin, and Mille Lacs Counties of Minnesota are given preference for awards.

THE ARNOLD R. WOLFF SCHOLARSHIP was established in 1985 by Mr. Wolff, Class of 1940, as part of the College's scholarship endowment for minority students.

THE BARBARA MARTIN WOODARD ENDOWED SCHOLARSHIP FUND was established in 1998 by Grant Woodard ' 45 in memory of his wife, Barbara, Class of 1945. This scholarship is awarded to one or more students whose educational interest is in social work.

THE W. SCOTT WOODWORTH MEMORIAL FUND was established in 1929 by Mr. and Mrs. Sumner T. McKnight to assist students of music.

THE YOUNG QUINLAN SCHOLARSHIP FUND was established in 1968 by the Young Quinlan Company of Minneapolis.

THE ALICE N. YOUNGS SCHOLARSHIP FUND was established in 1970 by Edwin B. Youngs, Class of 1963, as a memorial to his wife.

## Current Scholarship Awards

The following grants and awards provide scholarship money for students demonstrating financial need. As with the endowed scholarship funds, students need not apply for these scholarships directly; they are awarded at the discretion of the College and administered as an integral part of Carleton's financial aid program.

THE CHARLES AND ELLORA ALLISS EDUCATIONAL FOUNDATION SCHOLARSHIP, created in 1960 under the will of Charles Clifford Alliss, offers scholarship aid to residents of Minnesota.

THE DAVIES SCHOLARSHIP was established in 1983 by Mr. and Mrs. John G. Davies to provide financial assistance to students from single-parent households. The Davies are the parents of Wanda Davies, Class of 1978.

THE DONALD SCHOLARS FUND was established in 2001 by Arnold and Hazel Donald, Carleton alumni from the Class of 1976. Recipients are selected from applicants of St. Augustine High School and Xavier University Preparatory School in New Orleans, Louisiana.

THE DOOR COUNTY SCHOLARSHIP was established by Spencer '52 and Barbara '57 Gould in 2003. Preference for awards will be made to students originally from Door County, Wisconsin. Scholarships may also be awarded to students from small towns and rural areas of Wisconsin, or to students of color from Wisconsin.

THE DOW CHEMICAL COMPANY FOUNDATION SCHOLARSHIP is awarded annually to chemistry majors planning to continue their studies at the graduate level.

THE MARY FJELSTAD FACCIANI SCHOLARSHIP was established in 1980 and is funded by Clara Facciani and Rudolph Facciani in memory of their daughter-in-law Mary, Class of 1971, to assist music students at Carleton.

THE FIRST NATIONAL BANK OF NORTHFIELD SCHOLARSHIP was established in 1998 for the benefit of Northfield High School graduates. Two scholarships are awarded each year to first year students and are renewable based on academic performance.

THE GEORGE INTERNATIONAL FELLOWS FUND was established in 1999 by the George Family Foundation. Preference for awards will be given to students from developing nations who demonstrate economic need and exceptional academic potential and promise.

THE ADA HARRISON SCHOLARSHIP FOR THE CAMBRIDGE EXPERIENCE was created in 1996 by the Weissman family to honor Ada Harrison, a 30-year member of the economics department faculty. The fund supports students with financial need who attend the Carleton Economics Seminar in Cambridge, England.

THE CLAIRE SCHMUCKEL LANDAU '37 ENDOWED SCHOLARSHIP was established in 2002 by Richard and Claire Landau to support students studying music.
physics, astronomy, math, or computer science majors who demonstrate academic excellence and who plan to attend graduate school and pursue a career in their major.

THE VERNON JAMES PICK FOUNDATION SCHOLARSHIP is funded by the Vernon James Pick Foundation and awarded to junior or senior science majors of outstanding merit.

THE JUDITH ANN SOSTED '61 SCHOLARSHIP FUND FOR OFF-CAMPUS STUDIES was established in 2003 to support female students participating in an off-campus study program.

## THE STARR FOUNDATION SCHOLARSHIP FOR THE "ASIA IN COMPARATIVE

PERSPECTIVE" PROGRAM was established in 1997 by the Starr Foundation to support students attending Carleton from Asian countries.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS are available through limited funds provided to the College each year by the federal government. Grants are restricted to students with exceptional financial need.

## Fellowships and Prizes

The following prizes and research opportunities are open to all students in the groups indicated.
THE FRANCES AND ROL ALLENSWORTH ENDOWED GEOLOGY FUND was established in 2001 through the will provision of Georgina Michl '96. This fund provides for visiting lecturers, a geology research associate, and a stipend/fellowship for student research and travel.

THE JOHN K. BARE PRIZE IN PSYCHOLOGY was established in 1983 by students, colleagues, friends, and family of Dr. John Bare to honor him for his many contributions to his students, to Carleton's Department of Psychology, and to psychology teaching in America. This prize is awarded annually to a member of the senior class who has demonstrated outstanding achievement in the study of psychology.

THE JAMES S. BERGLUND SOCIAL SCIENCE PRIZE was established in 1962 by friends and classmates of James S. Berglund, who died shortly after his graduation in 1961. The prize is awarded annually for the best essay or research paper written in the social sciences.

THE SCOTT TYLER BERGNER PRIZE FUND was established in 1978 by Mr. and Mrs. Carsten Retrum in memory of Scott Tyler Bergner, son of Susan Retrum Bergner, Class of 1969, and Jeffrey T. Bergner, Class of 1969. The prize is awarded each year to a member of the senior class who has an outstanding academic record and who has demonstrated excellence of thought and character. The prize will be used to further the pursuit of excellence.

THE BERNSTEIN DEVELOPMENT FOUNDATION GEOLOGY ENDOWMENT was established in 1985 to support geological field study, research for students, and opportunities for students to present original research at professional meetings.

THE CATHERINE E. BOYD PRIZE IN MEDIEVAL AND RENAISSANCE STUDIES was established in 2001 by an anonymous donor. The prize is awarded for the best research essay in any relevant field.

THE CARLETON SCIENCE FELLOWSHIP, which was established in 2009, serves to broaden participation of historically underrepresented groups in the sciences. The Science Fellowship provides mentoring and two summers of research laboratory experience, and is supported by funding from the Howard Hughes Medical Institute.

THE CARLETON SOCIAL JUSTICE INTERNSHIP is made possible through the Barry "Mike" Casper and Paul and Sheila Wellstone Fund for Community Engagement, the Clement F. Shearer Fund for Achieving Common Ground, and the Interfaith Social Action Fund. These internships are awarded to students pursuing unpaid or low-paying summer internships or training programs in organizations promoting social justice. The awards seek to encourage students to put their values into action, gain experience outside of the classroom, and help others through social change.

THE CARLETON TONI AWARD IN THE ARTS was established in 1996 to honor the memory of Antoinette Sostek, dance instructor at Carleton from 1971 to 1996. The prize is awarded annually to a junior or senior who most aptly reflects the spirit of Toni's teachings: finds the fun in shared experience; understands that major challenges are overcome through small steps and small triumphs; exults in the joy of personal achievement; and does not let personal limitations or conventional wisdom discourage creative expression.

THE CLASS OF 1885 PRIZE is awarded annually to the student submitting the best work of imagination in prose.

THE CLASS OF 1963 FELLOWSHIPS, established by gifts from the Class of 1963, are awarded to qualified students to carry out independent research activities in any field taught at the college or to undertake projects in the creative or performing arts. Normally the fellowships are awarded to juniors for use during vacation periods to support a project unrelated to Carleton course work; occasionally, however, these fellowships may be used during the academic year for projects that would qualify for independent study credit.

THE MARGARET DALTON CURRAN PRIZE was established in 1986 by family and friends of Margaret Dalton Curran, Class of 1926. In recognition of the lifelong interest in excellent writing she developed while she was a student at Carleton, this prize is awarded annually to a student submitting the most accomplished academic essay.

THE DANA AWARD FOR PERSONAL ACHIEVEMENT was established in 1949 by Ellis H. Dana, Class of 1924, in memory of his grandfather, the Reverend Malcolm McGregor Dana, Trustee of Carleton from 1878 to 1888 . The award is given annually as a recognition to a male student in the senior class who, during four years at Carleton College, has shown superior personal achievement in developing a balanced combination of high scholarship, exceptional leadership abilities, and outstanding Christian character, and as a symbol of confidence in the promise of future attainment in his chosen field of public service.

THE DIMSDALE PRIZE FOR UNDERGRADUATE MEDICAL RESEARCH was established in 2008 by Dr. Joel Dimsdale, Class of 1968, to support off-campus research by Carleton students who are interested in pursuing a career in medicine.

THE MIKE EWERS AWARD FROM THE MINNESOTA SPACE GRANT CONSORTIUM is awarded to juniors involved in space-related research who best exemplify the vision for the exploration of space of Mike Ewers '04 and his enthusiasm for public outreach.

THE DR. E. A. FATH ENDOWED RESEARCH FUND was established in 1986 by Catherine Fath Sherry, Class of 1935. Income from the fund supports student research in astronomy and student travel to major research telescopes.

THE DAVID JOHN FIELD PRIZE was established in 1984 by Mr. and Mrs. Harold C. Field as a memorial to their son. The prize is awarded each year to a member of the senior class whose nonathletic activities best exhibit the qualities of imagination, ingenuity, energy, verve, and zest for life which David Field, Class of 1964, exemplified while living with his fellow students at Carleton.

THE CLINTON FORD RESEARCH FUND was established in 1983 by Clinton Ford ' 35 to support student/faculty travel and research in astronomy.

THE STEVEN P. GALOVICH PRIZE IN MATHEMATICS was established in 2009 to honor the memory of Steve Galovich, professor of mathematics from 1974 to 1994. The prize is given to the graduating mathematics major who best reflects Professor Galovich's enthusiasm for and love of mathematics, zestful joy in life, sense of humor, and compassion for others.

THE GOODSELL AWARD is given to the graduating senior or seniors whose service and enthusiasm best exemplify support for the astronomy program at Goodsell Observatory. The award honors the longstanding tradition of astronomical observing and public outreach at Carleton College.

THE LAURENCE MCKINLEY GOULD PRIZE IN NATURAL SCIENCE was established in 1979 in recognition of the contributions made to scientific research and to liberal education by Dr. Laurence McKinley Gould, who served as Carleton's president from 1945 to 1962. This prize is awarded annually to a member of the senior class who has demonstrated excellence in experimental scientific research in either biology, chemistry, geology, physics, or psychology and who has studied one of the humanities at a level well beyond the minimum College requirement.

THE ELE HANSEN AWARD was established by friends, colleagues, and former students of Dr. Ele Hansen at the time of her retirement in 1986. The award is given annually to two senior female students who bring to sport the joy of participation and who have influenced others through their example, service, and leadership in the athletic or recreation program. This award publicly honors Professor Hansen, Chair of the Women's Physical Education Department from 1952 to 1986, in appreciation of the generosity, enthusiasm, and warmth she shared with generations of Carleton students.

THE DALE AND ELIZABETH HANSON FELLOWSHIP IN ETHICS was established in 2008 to honor the generosity of Dale ' 60 and Elizabeth Hanson, visionaries behind the Ethical Inquiry at Carleton (EthIC) program. The fellowships allow students to pursue research as an extension of work from a previous course or to examine ethical questions as they relate to their major. The summer research fellowships are awarded to first, second and third year students.

THE A. M. HARRISON PRIZE IN ECONOMICS was established in 1979 by former students, friends, and colleagues of Dr. A. M. Harrison at the time of her retirement. The prize recognizes each year the outstanding academic achievements of a graduating economics major at Carleton. It also honors Professor Ada M. Harrison for 30 years of distinguished service to Carleton economics.

THE EILER HENRICKSON ENDOWMENT FUND FOR FIELD RESEARCH was established in 1987 to honor Professor Henrickson and his retirement from Carleton. The fund supports field research in geology.

THE HUNTINGTON POETRY PRIZE was established in memory of Dr. George Huntington, poet and novelist, professor of logic, rhetoric, and elocution at Carleton from 1879 to 1906. The prize is awarded to the student whose submitted poem, or group of poems, is judged to be the best.

## THE INITIATIVE FOR SERVICE INTERNSHIPS IN INTERNATIONAL DEVELOPMENT

 were established in 2003 by Stephen R. West ' 53 and his wife Phyllis M. West. This Initiative is intended to encourage internships for Carleton students to perform volunteer service in the areas of international community, social, and economic development, including credit and business cooperatives, public wellness and treatment, literacy and education, and other public services in developing countries.
## THE NEIL ISAACS AND FRANK WRIGHT FELLOWSHIP IN INVESTIGATIVE

JOURNALISM was established in 2007 to support students interested in investigative journalism in conjunction with the Center for Investigative Journalism in Berkeley, California.

THE JARCHOW FELLOWSHIP was established in 1986 and is awarded annually to an outstanding second-year resident assistant who has demonstrated leadership, integrity, love of the institution and people of Carleton, and other qualities represented by former Dean of Men, Merrill E. "Casey" Jarchow.

THE JEFFERSON NATURAL SCIENCES TEACHING AWARD is given annually to a current student who has demonstrated an interest in and capacity for teaching children or adults in the natural sciences. The award may be used for any purpose that would further the student's teaching career.

THE URSULA HEMINGWAY JEPSON MEMORIAL AWARD was established in 1968 by Jasper Jay Jepson, Class of 1925, in honor of his wife Ursula Hemingway Jepson, Class of 1925. The fund provides an annual cash award to the outstanding junior studio art student.

THE PAUL AND LYNN KELLEY ENDOWED FELLOWSHIP FUND was created in 2005 by Christina Kelley Sriver '93 and Joe Kelley Sriver to honor Christina's parents, Paul and Lynn Kelley, who have done a great deal to support and promote cultural understanding, including medical travels to Central America, years-long service to indigenous and tribal peoples, AIDS work, and much more. The fund is intended to support students with financial need who are doing research fellowships abroad.

## THE ROBERT J. KOLENKOW AND ROBERT A. REITZ ENDOWED FUND FOR STUDENT SCIENTIFIC RESEARCH was established in 2007 by David Ignat, Class of 1963, to honor Robert J. Kolenkow and Robert A. Reitz, two former members of the physics faculty at Carleton who had a lasting impact on Mr. Ignat's career as a physicist. This fund provides support to Carleton students pursuing research opportunities in the sciences.

THE IAN KRAABEL MEMORIAL PRIZE was established in 1987 by classmates and friends of Ian Kraabel, Class of 1985, who died in an avalanche on Mount Baker in the summer of 1986. This award honors Ian Kraabel's unusual intensity, originality, and athletic ability, and is given each year by the History Department to the student who best reflects Ian's personal qualities, including his desire to pursue understanding and knowledge.

THE PAT LAMB AWARD was established in 1994 by former students, colleagues, and friends of Patricia A. Lamb. This award is given annually to two outstanding senior female athletes who have achieved athletic excellence and also a high level of academic achievement. One of those athletes has excelled in team sports, the other in individual sports. This award publicly honors Pat Lamb, Carleton's first Director of Women's Athletics (1970-1985). Professor Lamb was an influential leader in the early
development of increased opportunities for women not only at Carleton, but also at the state, regional, and national levels.

THE SIGRID AND ERLING LARSEN AWARD IN THE CREATIVE AND PERFORMING ARTS was established in 1961 to honor the memory of Sigrid Larsen, Class of 1962, and her father Erling Larsen, Carleton professor of English from 1956 to 1974. The award is given annually to a student who has done the most memorable or distinguished work in literature, drama, music, art, dance, photography, or film, either as a creator or performer.

THE LARSON INTERNATIONAL FELLOWSHIPS were established in 1986 by Robert, Class of 1956, John, Class of 1960, and David Larson, Class of 1963, in memory of their parents Frances W. and Eugene Larson, who had a deep interest in Carleton and were champions of international understanding and involvement. The Fellowships enable students with leadership promise to have a significant international summer experience.

THE LOFGREN FELLOWSHIP FUND (Carleton College Alumni Business Program) was established in 1984 by Charles Lofgren Sr., Class of 1927. Fellowships are awarded annually to alumni who wish to undertake an extensive program for mid-career education intended to expand their horizons and leadership roles in the for-profit sector of the economy. Candidates selected may pursue part- or full-time study in graduate Masters of Business Administration or Executive MBA programs.

THE DAVID MAITLAND—ROBERT WILL PRIZE was established by Pastor Kirbyjon H. Caldwell '75, and his wife Suzette, to honor two professors who had a major impact on him. This prize is awarded to a student completing their sophomore year who, in the judgment of the Economics Department and the College Chaplain, has shown the greatest capacity to transform a community during their time at Carleton.

THE ROBERT T. MATHEWS STUDENT FELLOWSHIP FOR ASTRONOMY STUDY was created in 2003 by Jon Laible '59 to honor the memory of Professor Mathews. This fund supports student research related to the study of astronomy.

THE ADELAIDE H. MATTESON SERVICE INTERNSHIP is awarded annually to a junior or senior who has exhibited a high degree of academic achievement, motivation with respect to problem solving, and desire to pursue an environmental career.

THE ANDREW W. MELLON FOUNDATION UNDERGRADUATE FELLOWSHIPS were established in 1996 for student research in the humanities, social sciences, and selected natural sciences.

THE JERRY MOHRIG PRIZE IN CHEMISTRY was established in 2006 by Jerry Mohrig to recognize a chemistry major who has excelled in the study of chemistry and in undergraduate scientific research. Faculty members of the Chemistry Department participate in the annual selection of candidates.

THE MORTAR BOARD FUND was established by members of Mortar Board and is awarded each year for the purchase of books to a member of the previous first-year class who has achieved a distinguished grade point average.

THE DACIE MOSES AWARD was established in 1981 by the Alumni Association as a celebration of the warmth, generosity and hospitality of Dacie Moses, who contributed much to the lives of Carleton
students. The award is given annually to a student or students who continue to express the hospitality, caring, and concern characteristic of Candace Kelley Moses.

THE WILLIAM MUIR FUND was established in 1985 to support the Biology Department. The fund provides for ACM Wilderness Field Station scholarships, a stipend for outstanding juniors interested in plant sciences, the maintenance of the Carleton greenhouse, and a speaker program.

THE EDWARD H. "TED" MULLIN HISTORY PRIZE was established in 2007 in memory of Ted, who lost his life to cancer in September 2006 while a student at Carleton. The prize is awarded by the History Department during winter term to the junior history major who most exemplifies Ted's love of history, academic excellence, selflessness, courage, and tenacity. The award is to be used to support travel and/or research opportunities that enhance the student's academic or broader learning journey.

THE RICHARD T. NEWMAN FAMILY FUND FOR LANGUAGE STUDY INTERNSHIPS was established in 2004 by Mr. Newman, Class of 1949. The fund supports and encourages students to pursue internships in foreign countries that can lead to career opportunities in the field of foreign languages.

THE PHILIP H. NILES PRIZE IN MEDIEVAL AND RENAISSANCE STUDIES was established in 2001 by an anonymous donor. The prize is awarded for the best short essay in any relevant field.

THE NOYES PRIZES were founded in 1908 by the late Daniel R. Noyes of St. Paul. Distinguished scholars are selected from a list of eligible members of the senior class, based on grade point average and/or nominations of the faculty.

THE DAVE OKADA MEMORIAL PRIZE IN THE SOCIAL SCIENCES, established in 1972, is awarded annually to the social science major who has demonstrated the most remarkable intellectual achievement in his or her studies.

THE JONATHAN PARADISE ISRAEL EXPERIENCE SCHOLARSHIP was established by Mansoor Alyeshmerni, Carleton's Hebrew instructor for many years, to honor his teacher, Professor Jonathan Paradise. Its purpose is to provide financial support to Carleton students who wish to learn more about the culture, history, and politics of Israel and to better understand the global community in which they live.

THE PHI BETA KAPPA PRIZES are offered annually by the Carleton Chapter of Phi Beta Kappa: one is awarded to a first-year student, a second to a member of the sophomore class. Each student holds the highest class ranking for the year in scholarship among the members of their respective classes.

THE CHARLES W. POTTS ENDOWMENT FUND was established in 1986 by his daughters Katherine Potts MacDonald, Class of 1928, and Ruth Potts Culbertson, Class of 1930. Income from the fund supports field study and research for geology students.

THE REEVE PRIZE was established in 1881 in memory of Miss Minnie A. Reeve of Minneapolis. A distinguished scholar is selected from a list of eligible members of the senior class, based on grade point average and/or nominations from the faculty.

THE WARREN RINGLIEN MEMORIAL PHYSICS PRIZE honors a graduating physics major who has demonstrated the ability to construct complicated scientific instrumentation, and then use them
in real applications. Warren Ringlien was Carleton's instrument maker for many years and had the ability to build wonderful devices for use in the sciences. This prize recognizes a student who has similar skills.

THE FRANK LUDWIG ROSENOW FUND was established in 1973 for student research in biology.

THE ALLEN AND IRENE G. SALISBURY STUDENT FELLOWSHIP was established in 1997 by Richard A. Salisbury, Class of 1966, and Irene G. Salisbury. The Fund recognizes the service of James F. Fisher, John W. Nason Professor of Asian Studies and Anthropology. This endowed fund supports student fellowships for independent research outside the classroom. Students studying any discipline are eligible to receive awards, with preference given to juniors and seniors studying an aspect of Nepal or Asia.

THE RICHARD A. SALISBURY ENDOWED FUND was established in 2000 by Richard A. Salisbury '66. These fellowships will provide for independent research in any field taught at Carleton or will allow students to undertake projects in the creative or performing arts. Preference for awards will be given to students studying in Latin America or Africa. Juniors and seniors receive primary consideration for the award.

THE JEAN SCHMIDT PRIZE, created in memory of Jean Schmidt, Class of 1973, is awarded annually to that student who embodies Jean's enthusiasm for learning and love of people.

THE SECOND CENTURY STUDENT AWARD honors a member of the Carleton student body who has made an outstanding contribution to the College through significant service to others. The award is not intended to recognize academic or political success, but rather to honor service on- or off-campus which in other ways enriches and strengthens the institution and the lives of its members.

THE M. LEITH SHACKEL INTERNSHIP ENDOWMENT FUND was created in 2005 by Margaret and Walter Wales in commemoration of their 50th reunion celebrations. The fund supports Carleton students who participate in internships and honors Dr. Shackel who held various offices at Carleton from 1946 through 1973 including Director of the Placement Office and Dean of Women.

THE HARRIET SHERIDAN ENDOWED PRIZE was established by Pastor Kirbyjon H. Caldwell ' 75 and his wife Suzette, to honor Professor Sheridan, former acting president, dean, and professor of English at Carleton, who had a major impact on Pastor Caldwell when he was a student. Additional funding has been provided by John Bullion ' 74 and his wife Betty. The purpose of this prize is to recognize qualities that are important in defining a Carleton education - in this instance, writing ability. This prize is awarded to a student completing their sophomore year who, in the judgment of the Chair of the English Department and the Coordinator of the Writing Program, has shown the greatest growth in writing ability in the first two years at Carleton.

## THE BARDWELL SMITH PRIZE FOR EXCELLENCE IN THE STUDY OF RELIGION,

 established in 2006 on the occasion of the 50th anniversary of Carleton's Department of Religion, celebrates the leadership and career of the John W. Nason Professor of Religion and Asian Studies, Bardwell L. Smith. The prize is awarded each year by the Department of Religion to a student who exhibits a passion for the life of the mind, a willingness to take intellectual risks, and a desire to grow and change as a young scholar.THE ELLEN ROGERS STEIF MEMORIAL AWARD was established by the family and friends of Ellen Steif who died of cancer in the fall of 1979, two years after her classmates had graduated from Carleton. Ellen's interest in history and her personal courage in the face of death were an inspiration to her many friends at Carleton during her long and painful illness. The prize is awarded each year to the student who best reflects Ellen's personal qualities and academic achievements.

THE DUNCAN STEWART FELLOWSHIP was established in 1976 by Daniel Gainey, Class of 1949, in honor of Duncan Stewart, Professor of Geology at Carleton for nearly 25 years. Each spring two or three students from the junior class are selected to serve as Stewart Fellows during their senior year. The principal criteria for selection are excellence in scholarship, a high level of intellectual curiosity, potential for scientific growth, a demonstrated ability to work independently, and involvement in department activities. The Fellowships provide outstanding students an opportunity to pursue projects that will aid in their intellectual and scientific growth to a degree not possible without the Fellowship.

THE STIMSON PRIZE, established in 1873 by the Reverend Henry A. Stimson, D.D., Minister of Plymouth Congregational Church, Minneapolis, is intended to encourage public speech. This prize is awarded to a student who contributes most to the quality of debate or public speaking at the College.

THE FRANK E. STINCHFIELD ENDOWED PRIZE FUND, established in 2000 by the Margaret and Frank Stinchfield Foundation, is awarded in the fall to an academically outstanding member of the senior class.

THE STRANG PRIZE was established in 2004 by William and Lee Strang to support juniors with an interest in world politics and Asian studies. The prize enables an adventuresome and intellectually promising student to have a significant experience in Asia.

THE SAMUEL STRAUSS PRIZE was established in 1982 by Robert S. Strauss, Class of 1973, in memory of his father. The prize is awarded annually to recognize accomplished humorous writing.

THE TECHNOS INTERNATIONAL PRIZE is awarded each year to a graduating senior with a record of academic excellence and an interest in promoting international understanding. It is balanced by a similar award given by Carleton to a student at Technos International College in Tokyo.

THE ANN GOODSON WEINER PRIZE IN THEATER AND DANCE was created in 2004 by Professors Carl and Ruth Weiner to honor Carl's mother and Ruth's mother-in-law. The prize will be awarded annually to the senior student who, in the judgment of the Chair of the Department of Theater and Dance, has contributed the most significant performance in theater or dance. The purpose of the prize is to honor Ann Goodson Weiner and recognize the hard work, dedication, and inspiration involved in creating a truly unique performance.

THE MARY WIESE ENDOWED PRIZE was established in 1992 to honor the memory of Maria Eugenia Wiese. This prize honors Mary's respect for education, her profound love for students and her understanding of the place of education in their futures. Qualities Mary valued in others and that formed the core of her own character were: cultural pride, kindness, perseverance, self-reliance, discipline, and respect and care for other people. This prize is awarded to a graduating senior who embodies the above qualities and who has demonstrated perseverance in overcoming challenging circumstances. To honor the pride Mary had in her Latino culture, preference will be given to Latino students.

THE ROBERT E. WILL ECONOMICS PRIZE is awarded to the senior economics major or majors who demonstrate excellent academic achievement and breadth of intellectual interests in the best tradition of the liberal arts education.

## THE WILLIAMS-HARRIS ENDOWED PRIZE IN AFRICAN AMERICAN STUDIES was

 established on history professor Harry Williams's 50th birthday to honor his mother, Edith Moselle Harris Williams (1931-1992); his grandmother, Patsy Harris Tunson (1914-1998); and his great-aunt, Ellen Harris Brooks (1909-1998). This prize recognizes their respect for the transformative power of education, the vast richness of their life experiences, and the strength of their characters. The prize recognizes a member of the senior class who has produced a distinguished integrative exercise on any aspect of the African American experience in the New World.
## THE LAURENCE AND LUCILLE WU FAMILY ENDOWED FUND FOR

 FACULTY/STUDENT COLLABORATIVE STUDY PROJECTS was established by Dr. and Mrs. Laurence T. Wu in 2005. This fund is meant to foster joint study/research projects of students and faculty with emphasis on the collaboration between students and faculty. Such collaboration not only strengthens scholarship, but enhances friendships between faculty and students.
## Trophy Awards

The following trophy awards are made annually to individual students in the groups indicated.
THE WARREN L. BESON MEMORIAL AWARD for athletic and academic excellence is given to a senior who has won one or more awards in any sport, has a high scholastic average, and is unanimously recommended by the Director of Athletics, the Dean of Students, the faculty representative to the Minnesota Intercollegiate Athletic Conference, and the officers of the "C" Club. The award is not necessarily given annually.

THE C. J. HUNT FOOTBALL AWARD was established in 1957 by Carleton alumni in the Twin Cities area to honor Mr. C. J. Hunt, who was head football coach and Director of Athletics at Carleton from 1913 to 1917 and from 1920 to 1931. The award is given annually to the Carleton football player who has shown the most improvement during the current season.

THE KELLY MEMORIAL BASEBALL AWARD was established in 1949 by Mr. and Mrs. Thomas R. Kelly of Owatonna, Minnesota, as a memorial to their son, Lieutenant James M. Kelly, Class of 1945. Lieutenant Kelly, an officer in the United States Army, died in France on September 1, 1944, of wounds received in the Battle for Brest. The trophy is awarded each year to the player making the most outstanding contribution to the Carleton baseball team.

THE WILLIAM S. AND MARY AGNES KELLY MEMORIAL AWARD was established in 1988 by Mr. Kelly's children and friends as a memorial tribute and to honor one male and female track athlete annually judged by the coaches as the most improved track team members. Mr. and Mrs. Kelly were the parents of two Carleton alumni: William S. Kelly, Jr., Class of 1957, and Thomas S. Kelly, Class of 1960.

THE LIPPERT MEMORIAL FOOTBALL AWARD was established in 1953 by Mr. and Mrs. Cort Lippert of Northfield, Minnesota. Cort Lippert, Class of 1939, is a brother of Lieutenant James A. Lippert, United States Army Air Corps, who was killed in 1943 in Italy. The trophy, a memorial to

Lieutenant Lippert, is awarded each year to the player who contributes the most to the Carleton football team.

THE JOHN M. MILLEN TRACK AWARD, established in 1959 by Mr. Theodore Kolderie, Class of 1926, is presented to the athlete "who has contributed the most in the interest of track." The award memorializes John M. Millen, track coach and resident head of men's dormitories at Carleton from 1923 until his death in 1930.

THE STEPHEN F. SMITH MEMORIAL CROSS COUNTRY AWARD was established in 1966 by the family and friends of Stephen F. Smith, who drowned in a boating accident during the summer of his junior year. It is presented annually to the athlete who displays the greatest dedication to cross country running and to Carleton athletics.

THE MIKE STAM MEMORIAL AWARD was established in 1988 by friends and family of Mike Stam '89, a Carleton athlete killed in a snowmobiling accident in January of 1988. The award is presented to the outstanding defensive lineman in the MIAC as voted on by the MIAC coaches.

THE MEL TAUBE AWARD, established in 1980 by the Alumni "C" Club and other friends, is given for dedication, loyalty, competitive spirit, and excellence in varsity athletics. The award, presented in memory of Melvin H. Taube, who coached at Carleton from 1950 to 1970, is not necessarily given annually.

THE MARC VON TRAPP SPIRIT AWARD was created by family, friends and teammates in 1998 to memorialize Marc von Trapp, Class of 2000, who died during his sophomore year. The award is presented annually to the most outstanding member of the Carleton College Hockey Team who contributes the most both on and off the ice. The Marc von Trapp Spirit Award is the highest honor given to a Carleton hockey player.

THE WARNECKE SWIMMING AWARD was established in 1956 by Mr. Frederic E. Warnecke of Evanston, Illinois. It is presented each year to the senior swimmer who has made the greatest contribution to the Carleton swim team.

THE MATT ZELL SOPHOMORE PLAYER AWARD was established in 1968 by his former teammates, as a memorial to Major Matthew N. Zell IV, Class of 1959, who died in 1967. The trophy is awarded each year to a sophomore football player for dedication and loyalty to the Carleton football team.


#### Abstract

Alumni

The Carleton Alumni Association is as old and vibrant as the College itself. Its membership consists of all persons who ever matriculated as students at the College. It is now an organization that is international in scope with more than 25,000 alumni throughout the world. The purpose of the Carleton Alumni Association is to strengthen the ties between alumni and the College, and among alumni, developing and affirming the culture of alumni stewardship. The Association is comprised of individual members, class organizations (particularly active during their reunion years) and groups of alumni (e.g. the Chicago Carleton Club, the Multicultural Alumni Network, etc.) organized to promote and coordinate alumni activities.


The Association is led by the Carleton Alumni Council, with about 25 active directors. The Alumni Council selects individuals to receive Alumni Association Awards for Distinguished Achievement, Exceptional Service and In the Spirit of Carleton, presented at an awards ceremony during reunion weekend each June. Alumni support Carleton through both organized and individual activities, on and off campus, including assistance to the Office of Admissions (through the Alumni Admissions Program) the Career Center, the Alumni Annual Fund and academic departments of the College. Alumni are also represented on the Board of Trustees and on the College Council. In turn, Carleton serves its alumni by keeping them informed through publications like The Carleton Voice, regional, local and class newsletters and the Carleton web site. The College also sponsors reunions, meetings, seminars, workshops, off-campus activities, lifelong learning opportunities, and other functions which bring together alumni, faculty, parents, friends and students. The Office of Alumni Affairs is the primary point of contact between the College and its alumni.

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200 South Sixth Street, Suite 4000, Minneapolis, Minnesota 55402
PAUL T. VAN VALKENBURG**, BA; 2007—Principal, Mortgage Industry Advisory Corporation 80 Maiden Lane, $14^{\text {th }}$ Floor, New York, New York 10038

## Term Expires in June 2012

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3705 Dartmouth Avenue, Dallas, Texas 75205
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MARK W. BANKS, BA, MD; 2005—Retired Chief Executive Officer, Blue Cross and Blue Shield of Minnesota

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520 Summit Avenue, Mill Valley, California, 94941-1082
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1100 Wilson Boulevard, Suite 601, Arlington, Virginia 22209
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1920 E Parham Road, Richmond, Virginia 23228
ARTHUR D. KOWALOFF, BA, JD; 2010-
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676 North Michigan Avenue, Suite 3700, Chicago, Illinois 60611
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10215 80 $^{\text {th }}$ Avenue NW, Gig Harbor, Washington 98332
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## The Faculty

The date immediately following a name indicates the year of appointment at Carleton.

## Key to superscripts

1 On leave fall
2 On leave winter
3 On leave spring
4 On leave for year
5 On leave fall and winter
6 On leave winter spring
7 On leave fall and spring
STEVEN G. POSKANZER, 2010--President and Professor of Political Science
Princeton University, AB; Harvard University, JD

BEVERLY NAGEL, 1980--Dean of the College and Winifred and Atherton Bean Professor of Sociology, Science, Technology, and Society

Carleton College, BA; Stanford University, MA, PhD
NATHAN D. GRAWE, 1999--Associate Dean of the College and Associate Professor of Economics
St. Olaf College, BA; University of Chicago, MA, PhD
ARJENDU K. PATTANAYAK, 2001--Associate Dean of the College and Associate Professor of Physics

St. Stephen's College Delhi University, BSc; Brown University, ScM; University of Texas (Austin), PhD

ÉVA PÓSFAY, 1991--Associate Dean of the College and Professor of French
Bryn Mawr College, AB, MA; Princeton University, MA, PhD

KENNETH B. ABRAMS ${ }^{6}$, 2008--Assistant Professor of Psychology
Dartmouth College, BA; University of Minnesota, PhD
SHARON ATSUKO AKIMOTO, 1991--Professor of Psychology
University of Utah, BA, MS, PhD
DAVID G. ALBERG, 1993--Professor of Chemistry
Carleton College, BA; University of California (Berkeley), PhD
BARBARA ALLEN, 1988--Professor of Political Science
Indiana University, BA, MA, PhD
BENJAMIN ALLEN, 1994--Senior Lecturer in Voice
Wartburg College, BMusEd
MARIA DEL PALMAR ÁLVAREZ-BLANCO, 2006--Assistant Professor of Spanish
Universidad de Valladolid, Licenciada; University of Villanova, MA; University of Colorado (Boulder), PhD

GWEN ANDERSON, 1986-90, 2001--Lecturer in French Horn
University of Minnesota, BA

DEBORAH APPLEMAN, 1986--Hollis L. Caswell Professor of Educational Studies
University of Minnesota, BS, MA, PhD
LAWRENCE L. ARCHBOLD ${ }^{1}$, 1982--Professor of Music \& Enid and Henry Woodward College Organist

University of California (Berkeley), AB, MA, PhD
JONATHAN J. ARMEL, 2009--Visiting Assistant Professor of Mathematics
Oberlin College, BA; University of California (San Diego), PhD
JENNIFER A. BADER, 2001--Lecturer in Dance
University of the Arts, BFA
PETER BALAAM, 2003--Associate Professor of English
University of California (Berkeley), BA; Princeton Theological Seminary, MDiv; Princeton University, MA, PhD

LUCIANO BATTAGLINI ${ }^{1}$, 2007--Assistant Professor of Physical Education, Athletics and Recreation and Head Women's Tennis Coach

Oklahoma Christian University, BS; Oklahoma State University, MS
SHADI BAYADSY, 2009--Adjunct Instructor in Arabic and Hebrew
University of Haifa, BA; University of Texas (Austin), MA
MARTHA-ELIZABETH (MARTY) BAYLOR, 2007, 2009--Assistant Professor of Physics
Kenyon College, BA; University of Colorado, PhD
JAY BECK, 2010--Assistant Professor of Cinema and Media Studies

State University of New York (Buffalo), BA; University of Iowa, MA, PhD
STACY N. BECKWITH, 1999--Associate Professor of Hebrew
University of Toronto, BA; University of Minnesota, MA, PhD
MUHAMMAD FARESS BHUIYAN, 2010--Assistant Professor of Economics
Northwestern University, BA, MA
CYNTHIA A. BLAHA, 1987--Professor of Physics and Astronomy

University of Minnesota, BS, MS, PhD

KRISTIN C. BLOOMER, 2010--Assistant Professor of Religion
Wesleyan University, BA; Cambridge University, BA, MA; University of Montana, MFA; University of Chicago, MA, PhD

BECKY J. BOLING, 1983--Stephen R. Lewis, Jr. Professor of Spanish and the Liberal Arts
Indiana State University, BS, MA; Northwestern University, PhD
PETER DAVID BRANDON, 2008--Broom Professor of Social Demography
Michigan State University, BA; The University of Michigan, MA; The University of Chicago, PhD

JORGE BRIOSO, 2001--Associate Professor of Spanish
University of Havana, BA; City University of New York, PhD
DANIEL P. BRUGGEMAN, 2002--Senior Lecturer in Art
University of Nebraska, BA, BFA; Hunter College, MFA
JACKSON BRYCE, 1972--Marjorie Crabb Garbisch Professor of Classical Languages and the Liberal Arts and Senior Lecturer in Bassoon

Catholic University of America, AB; Harvard University, AM, PhD
MICHAEL W. BURAND, 2007--Visiting Assistant Professor of Chemistry
University of Minnesota (Duluth), BS; University of Minnesota, MS, PhD
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Kalamazoo College, BA; University of Michigan, MA; University of Kansas, MA, PhD
LAWRENCE E. BURNETT, 1993--Professor of Music and Choral Director
Texas A \& I University, BMus; Eastern New Mexico University, MMus; University of Texas (Austin), DMA

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St. Olaf College, BA; Loyola University, MEd
SCOTT D. CARPENTER, 1990--Professor of French
University of Minnesota, BA; University of Wisconsin (Madison), PhD

DENNIS CASS, 2006, 2009--Visiting Instructor in English
Carleton College, BA
MARION E. CASS ${ }^{1}$, 1987--Charles Jim and Marjorie Kade Professor of the Sciences
Fort Lewis College, BS; University of Colorado, PhD
LAURA CAVIANI, 2003--Lecturer in Jazz Piano
Lawrence University, BMus; University of Michigan (Ann Arbor), MMus
JOSÉ CERNA-BAZÁN, 2001--Professor of Spanish
Universidad Nacional de San Marcos, Lima, BA; University of Minnesota, MA, PhD
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Delhi University, BA; University of Southern California, MA, PhD
JOSEPH WALTER CHIHADE, 2003--Associate Professor of Chemistry
Oberlin College, BA; Columbia University, MA, PhD
LAURA M. CHIHARA, 2000--Professor of Mathematics
University of Washington, BS; University of Minnesota, PhD
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Swarthmore College, BA; University of Pennsylvania, MSEd, PhD
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NELSON LLOYD CHRISTENSEN, JR., 1999--Professor of Physics
Stanford University, BS; Massachusetts Institute of Technology, PhD
ANDREW M. CLARK, 1993--Professor of Physical Education, Athletics and Recreation and Head Swimming Coach

Whitman College, BA; University of Oregon (Eugene), MS

CLIFFORD E. CLARK, JR. ${ }^{6}$, 1970--Professor of History and M.A. and A.D. Hulings Professor of American Studies

Yale University, BA; Harvard University, MA, PhD
KEVIN CLEMENTS, 2004--Lecturer in Jazz Bass
University of Missouri (Kansas City), BA
KELLY CONNOLE, 2004--Assistant Professor of Art
University of Montana (Missoula), BFA; San Francisco State University, MFA
LAURENCE D. COOPER, 1997--Professor of Political Science
University of Virginia, BA; New York University, MA; Duke University, MA, PhD
ELIZABETH COVILLE, 1985-91, 2000, 2008--Visiting Assistant Professor of Anthropology
Cornell University, AB; The University of Chicago, AM, PhD
CLINTON A. COWAN, 1997--Professor of Geology
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Florida State University, BA; Bowling Green State University, MA; University of Louisiana (Lafayette), PhD

CHARLES E. CRUTCHFIELD, III, 2003--Visiting Professor of Biology
Carleton College, BA; Mayo Clinic, MA, MD
AMY CSIZMAR DALAL, 2003--Associate Professor of Computer Science
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ANGELA CURRAN ${ }^{1}$, 2005--Assistant Professor of Philosophy
University of California (Berkeley), AB; University of Massachusetts (Amherst), PhD
MIHAELA CZOBOR-LUPP, 2010--Assistant Professor of Political Science
University of Bucharest, BA; University of Warwick, MA; University of Bucharest, PhD; Georgetown University, PhD

CAMERON DAVIDSON ${ }^{4}$, 2002--Professor of Geology

University of Wisconsin, BS; Princeton University, PhD

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LYNN DEICHERT, 1988--Senior Lecturer in Trumpet

Oberlin Conservatory, BMus; Boston University, MMus
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Iowa State University, BS; University of Iowa, MA; University of Massachusetts (Amherst), PhD
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AV Lunacharsky State Institute of Theatrical Art (GITIS), Moscow
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ANNICK FRITZ-SMEAD, 2000--Visiting Lecturer in French and Francophone Studies
University of Besancon, France, BA, MA; University of Minnesota, PhD
WEI-HSIN FU, 2007--Adjunct Instructor and GIS Specialist in Environmental Studies
Taipei Medical College, BS; University of Minnesota, MS
KATHLEEN M. GALOTTI, 1983--Professor of Cognitive Science
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MARSHA NIDANIE HENDERSON, 2008--Assistant Professor of Biology
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Indiana University, Bmus
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JUDITH HOWARD, 2007--Assistant Professor of Dance
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KENNETH HUBER, 1990--Senior Lecturer in Piano
Indiana University, BMus, MMus
HUMBERTO R. HUERGO ${ }^{3}$, 1988--Professor of Spanish
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Miami University (Ohio), BA, MA; University of Michigan, PhD
BAIRD E. JARMAN, 2002--Associate Professor of Art History
Williams College, BA; Williams College/Clark Art Institute, MA; Yale University, MA, MPhil, PhD
HEIDI L. JAYNES, 1999--Associate Professor of Physical Education, Athletics and Recreation and Head Women's Volleyball Coach

University of Oklahoma, BBA, MBA

JAY L. JOHNSON, 1988--Lecturer in Percussion and Director of the Carleton African Drum Ensemble

University of Minnesota, BFA, MMus
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Kobe Kaisei Women's College, BA; University of Illinois (Urbana-Champaign), MA, PhD
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Université de Nantes, Licence en lettres modernes et philosophie; Stanford University, MA, PhD
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HONG ZENG, 2004--Assistant Professor of Chinese
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GARY E. WAGENBACH, BS, MS, PhD——Winifred and Atherton Bean Professor of Biology, Science, Technology, and Society, 1969-2008

CARL D. WEINER, BA, MA——W. H. Laird Professor of History and the Liberal Arts, 1964-2004
WILLIAM B. WELLS, BA, MA, DMA——Professor of Music and Choral Director, 1966-1993
ROBERT E. WILL, BA, MA, PhD——Raymond Plank Professor of Incentive Economics, 1957-1993
WILLIAM F. WOEHRLIN, BA, MA, PhD——Laird Bell Professor of History, 1962-1993
ELEANOR M. ZELLIOT, BA, MA, PhD——Laird Bell Professor of History, 1969-1997

## Administrative Offices

## Academic Civic Engagement

Adrienne L. Falcón-Director of Academic Civic Engagement

## Academic Support Center

Kathy J. Evertz, BA, MA, PhD-Director for Academic Support Center
Roberta A. Groth-Program Assistant, Academic Support Center
Acting in Community Together
Laura Riehle-Merrill, BA, MA-ACT Director
Kelly A. Scheuerman, BA-Assistant Director, Acting in the Community Together

## Admissions

Paul J. Thiboutot, BA, MA-VP and Dean of Admissions and Financial Aid
Linda M. Borene-Assistant Dean of System Operations
Charles A. Cogan, BA, MA-Associate Dean and Director of International Recruitment
Virginia A. Deplazes-Admissions Application Specialist
Diane Fredrickson-Administrative Assistant in Admissions
Kendra J. Hanna-Lead Word Processing Operator \& Lead Admissions Computer Liaison

Jennifer Hantho, BA-Senior Associate Dean of Admissions
Kathryn M. Hargis, BA, MA-Admissions Software/Database Specialist \& Assistant to Director of Admissions

Katherine L. Jumbe, BA, MA-Assistant Dean of Admissions
Michele D. Kamen, BA-Campus Visits Coordinator in Admissions
Maureen D. Kerns, BS-Admissions Receptionist
Daniel G. Lugo, BA, JD-Associate Dean of Admissions
Linda Mueller-Administrative Assistant in Admissions
Rodney M. Oto, BA, EdM-Associate Dean of Admissions
Mary T. Steil, BA-Admin. Assistant, International Admissions \& Admissions Receptionist
Brian D. Swann, BA-Coordinator of Outreach Programs and Assistant Dean
Stefani Y. Tran, BA-Administrative Assistant in Admissions for Multicultural Recruit. \& Outreach Administrative Assistant

Carla E. Zelada, BA, MA-Assistant Dean of Admissions/Coordinator of Multicultural Recruitment

## Alumni Affairs

Rebecca Zrimsek, BA-Director of Alumni Affairs
Merilyn E. Calcutt, BS-Alumni Affairs Project Coordinator
Jeanne E. Estrem-Alumni Affairs Administrative Assistant
Amy C. Goerwitz, BA-Associate Director of Alumni Affairs
Ann Iijima, BA, JD-Associate Director of Alumni Affairs
Naja E. Shabazz, BA,-Assistant Director of Alumni Affairs
Patsy J. Trusty-Alumni Affairs Administrative Assistant

## Alumni Annual Fund Office

Christopher A. Clark, BA-Executive Director of Alumni Annual Fund and Parent Funds
Beth A. Dahle, BS-Sr. Associate Director of Alumni Annual Fund
Robert V. Herrick, BA-Associate Director of the Alumni Annual Fund

Tricia L. Kasa-Alumni Annual Fund Assistant

Stefanie A. Morrison, BA-Associate Director of the Alumni Annual Fund
Aaron D. Seifert, BA-Assistant Director Alumni Annual Fund
Jennifer A. Whitson-Office Manager \& Assistant to the Director of the Alumni Annual Fund

## Alumni Guest House

Renee Rezac-Coordinator of Alumni Guest House

## American Studies

Tamara S. Little-Administrative Assistant to American Studies, Environmental and Technology Studies, Linguistics and Arc Programs

## Arb Studies

Nancy C. Braker, BA, MS-Director of Cowling Arboretum
Matthew Elbert-Manager of Cowling Arboretum

## Archives

Eric S. Hillemann, AB, MA, MALS-College Archivist

## Art Gallery

Laurel E. Bradley, BA, MA, PhD-Director of Exhibitions \& Curator of the College Art Collect
Wendy Nordquist-Art Gallery Assistant
James F. Smith-Art Collection Registrar

## Art and Art History

Heidi B. Eyestone, BA-Curator of the Visual Resources Collection, Art/Art History
Patricia J. Germann-Administrative Assistant in Art/Art History
Gerald A. Krause, BA-Technician in Studio Arts

## Asian Languages \& Literatures

Marian J. Sherwin, BS-Administrative Assistant in Asian Languages and Literatures

## Biology

Randall Hagen, BA, MS-Animal Colony Supervisor and Greenhouse Coordinator
Carol L. Horan-Administrative Assistant in Biology
Alison L. Unger, BA, MS-Biology Stockroom Supervisor

## Bookstore

David M. Schlosser, BS, BA-Director of Carleton Bookstore
Julie L. Daley-Office Supplies Specialist/Bookkeeper, Bookstore
Brendon L. Etter, BA-Textbook Manager, Bookstore

Viola T. Ryder-Trade Book Manager, Bookstore
Carleen M. Thurnblad-Clothing and Gift Buyer, Bookstore

## Business Office

Linda Thornton, BBA, MBA-Comptroller

Susan D. Benson-Staff Accountant
Denise M. Dube, BA-Senior Accountant - Facilities

Debra J. Fawcett-Student Accounts Specialist
Barbara R. Fowler, BS-Assistant Comptroller

Barbara Harden-Senior Payroll Specialist
Randie F. Johnson, BS-Purchasing and Risk Manager

Candace L. Koen-Administrative Assistant

Kara L. Lloyd, BA-Staff Accountant - Purchasing
Shari L. Mayer, BS-Senior Accountant

Sandra J. Pieri-Student Accounts Specialist
Melissa A. Smith-Accounts Payable Specialist
Julie A. Vossen-Payroll Specialist
Campus Services

Julia H. Burmesch, BS-Director of Campus Services

Mary C. Amy-Info Desk Coordinator and Onecard Program Coordinator
Marilyn J. Hollinger-Fleet Vehicle Services Manager \& OneCard Program Coordinator
Noel S. Ponder-Campus Scheduling Coordinator \& OneCard Program Coordinator

## Career Center

Richard T. Berman-Director of the Career Center
Susan A. Bovbjerg, BS/BA, CMC-Projects Coordinator/Administrative Assistant
Michael L. Hendel, BS, MS-Associate Director, Manager of Operations
Bradley A. Kmoch, BA, MS-Program Coordinator, Career Center
Jessica J. Mueller, BA, MALS-Assistant Director, External Communities

Brent K. Nystrom, BA, MA-Assoc. Director, Career Center \& Manager, Mentor Relations
Debra J. Olien, BA, MS-Associate Director, Manager of Campus Outreach
Sarah B. Rechtzigel-Administrative Assistant, Career Center

## Chaplain's Office

Carolyn M. Fure-Slocum, BA, MDIV, MA-Chaplain
Shoshana S. Dworsky, BA-Associate Chaplain

Janis M. Truax-Administrative Assistant to Chaplain

## Chemistry

Julie R. Karg, BS-Chemistry Technician
Brian T. Mars, BA, MTh-Lab Manager in Chemistry, Instrument Specialist, Hazard Waste

Wendy Zimmerman-Administrative Assistant in Chemistry

## Cinema and Media Studies

Marla Erickson, BS-Administrative Assistant in Cinema and Media Studies
Paul Hager, BA-Technical Director of Cinema and Media Studies

## Classical Languages

Marian J. Sherwin, BS-Administrative Assistant in Classical Languages

## College Relations

Joe A. Hargis, BS, MA-Associate Vice President for External Relations
Gayle K. McJunkin, BA, MDIV-Associate Vice President for External Relations
Kerry Raadt, BA-Director of Events
J P. Stark-Technical Coordinator for Events
Melissa J. Thomas-Special Events Associate/Administrative Assistant for College Relations

## Computer Science

Susan L. Jandro-Administrative Assistant in Computer Science
Michael N. Tie, BS-Technical Director in Computer Science

## Corporate/Foundation Relations

Mark J. Gleason, BA, MA, PhD-Director of Corporate \& Foundation Relations
Nina P. Mangelsen, AA-Admin Asst to the Dir of Corporate \& Foundation Relations
Diane A. Menning, BSN-Corporate and Foundation Relations Administrative Assistant
Christopher J. Tassava, BA, MA, PhD-Associate Director of Corporate and Foundation Relations Custodial Services
J. K. Campbell, BS-Director of Maintenance \& Custodial Services

Karen L. Lawson-Custodial Services Supervisor
Lynn F. Nichols-Custodial Administrative Assistant
Patti L. Sabrowski-Custodial Services Supervisor
Dean of Students Office
M. H. Wagner, BS, MS-VP for Student Development and Dean of Students

Tamara M. Anderson-Senior Administrative Assistant to the Associate Deans
Joseph Baggot, BS, MA, PhD-Associate Dean of Students
Cathleen J. Carlson, BS, MEd-Associate Dean of Students
K.J. Spurgeon-Senior Assistant to the Dean of Students

Julie A. Thornton, BA, MS-Associate Dean of Students
Julia C. Uleberg Swanson, BS, MS-Dacie Moses House Coordinator

## Dean of the College Office

Beverly Y. Nagel, BA, MA, PhD-Dean of the College
Danette DeMann, AAS-Senior Administrative Assistant to the Associate Dean of College
Nathan D. Grawe, BA, MA, PhD-Associate Dean of the College
Charlene Hamblin-Headley House Coordinator
Becky J. Krogh-Academic Project Specialist
Brian T. Mars, BA, MTh-Chemical Hygiene Officer
Karen K. Moldenhauer-Senior Administrative Assistant to the Associate Dean of College
Andrea L. Nixon, BA, MA, PhD-Director of Curricular and Research Support
Arjendu K. Pattanayak, BSc, ScM, PhD-Associate Dean of the College
Peggy L. Pfister, BA-Senior Assistant to the Dean of the College \& Office Manager
Eva S. Posfay, AB, MA, MA, PhD-Associate Dean of the College
Steven G. Richardson, BA-Director of the Arts

## Development Office

Mari T. Aylin, BA, MS-Director of 50th Reunion Programs
Patrick Ganey, BA-Development Officer
Christian M. Hakala, BA, MA-Development Officer
Stefanie M. Kelly, BS, MS-Development Officer
Mary A. Niebur-50th Reunion Assistant
Daniel Rustad, BA, MA-Development Officer
Paula R. Schanilec, BS-Administrative Assistant, Major and Planned Giving
Susan M. Streefland-Administrative Assistant to the Director of Development

Judith A. Tabert-Planned Gift Administrator
Michael J. Tompos-Director of Major and Planned Giving
Lynne M. Wilmot, BA, JD-Planned Giving Officer

## Development Services

Julie K. Anderson, BA, MBA-Director of Development Services
Mark N. Egge, BS, MA-Director of Prospect Research
Denise M. Flicek, BS-Applications Support Specialist
Cynthia Grisim-Records System Administrator/Office Manager in Developmental Services
Terrence Hassanally, BA, MBA-Prospect Research Officer
Daniel J. Hinderaker, BA, JD (Law)-Prospect Research Analyst
Linda A. Irrthum-Alumni/Development System Specialist
Julie K. Kimber-Gift Accounting Assistant
Nancy L. Loesch, BS-Development Information Assistant
Anthony Pierre, BA-Applications Support Programmer
Shannon Schulz, BA-Director of Central Records
Pamela J. Sexton, AA-Gift Accounting Assistant
Carla J. Thomas, BA-Manager of Alumni/Development Information Systems
Economics
Debra G. Bjornard, BS-Administrative Assistant in Economics

## Educational Studies

Krista G. Herbstrith, BA-Administrative Assistant in Educational Studies

## English

Carolyn Soule, BA, MA-Administrative Assistant in English

## Facilities

Steven K. Spehn, BS-Director of Facilities and Capital Planning

Gloria Heinz-Facilities Communications Specialist
John T. Mathews, BA-Project Manager/Owner's Representative
Gregory F. McCracken-Facilities Project \& Safety Coordinator

Barbara M. Tousignant-Facilities Administrative Assistant

## French and Francophone Studies

Mary Tatge-Administrative Assistant in French

## Gender and Sexuality Center

Kaaren M. Williamsen, BA, MS, MA-Director of Gender \& Sexuality Center \& LGBT Advisor

## Geology

Ellen T. Haberoth-Administrative Assistant in Geology

Timothy D. Vick, BA, MAT-Technical Director in Geology
German and Russian

Mary Tatge-Administrative Assistant in German and Russian
Grounds

Dennis Easley, BA-Superintendent of Grounds
History
Marilyn C. Lamberty, BA-Administrative Assistant in History and German Studies Review Assistant
Human Resources
Kerstin M. Cardenas, BA, MS-Director of Human Resources
Karyn L. Jeffrey, BS-Associate Director of Human Resources
Emily H. Luhman, BS, MA-Recruitment and Training Coordinator

Samantha K. Malecha, BA-Human Resource Analyst
Andrea M. Zunkel-Benefits Coordinator
Information Technology Service

Joel P. Cooper, BA, MA-Director of Information Technology Services
Larry S. Azelton-Windows Systems Administrator
Rebecca Barkmeier, BA-Desktop Systems Administrator and Desktop Systems Administrator
Russell E. Bauer, BA, MIS/Business Administration-Computing Support Specialist
Matthew A. Bockol, BA-Web Technical Administrator
Carly J. Born, BA, MA-Academic Technologist
R. K. Chapman, BSc-Student Computing Coordinator

Michael T. Decker, BS-Hardware Asset Manager
Christopher J. Dlugosz, BA-Network Manager
David A. Flynn, BA-UNIX Systems Administrator
Douglas J. Foxgrover, BA-Communication \& Training Coordinator/Curator, College Weather Data
Richard L. Goerwitz, BA, MA, PhD-Database Administrator and Integrator/Data Warehouse Architect

Richard C. Graves, BA-Senior Unix Administrator/Network Security Administrator
Mark F. Heiman, BA-Senior Web Application Developer
Leslie P. LaCroix, BA-Strategic Technologist and Team Lead
Paula Lackie, BA, MA-Academic Technologist
Julie M. Latham, BA, MAT-Enterprise Applications and Data Warehouse Administrator
Matthew E. Lauterbach, BS-Applications Support Programmer
Candyce Lelm-Administrative Assistant for Information Technology Services
Tucker A. MacNeill, BFA, MFA-Academic Technologist and Media Lab Specialist
Karl E. Madsen, BS, MA-Applications Analyst
Chad W. Miller, BS-Systems and Project Manager, Team Lead
Sande Nissen, BA-Desktop Systems Administrator
Sara Oster, BS-Database Administrator

James R. Pence, BS-Hardware Repair Technician
James A. Pierret, BS, MAT-Presentation Technology Specialist
Austin Robinson-Coolidge, BA-Computing Support Specialist, Team Leader
Kendra L. Strode, BA-Computing Support Associate
Suzanne A. Traxler, BS-Associate Director of Information Technology Services
Neal L. Weeg, BA-Applications Support Programmer
Lewis Weinberg, BA-Media Technology Specialist and Team Lead
Tamara Wellentin-Computing Support Specialist
Institutional Research and Assessment
James C. Fergerson, BA, MA-Director of Institutional Research and Assessment
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Kate M. Doria, BA-Research Associate
Jodine K. Friedow, BS-Associate Director of Institutional Research and Assessment
Jacqulyn Marie R Lauer-Glebov, BS, MA-Assessment Consultant

## Intercultural Life Office

Joy J. Kluttz, BS, MA-Director, Intercultural and International Life
Kristen Askeland-Administrative Assistant, Intercultural \& International Life
Luyen Phan, BA-Associate Director, Intercultural and International Life
DeAngelo J. Washington, BS, MS-Assistant Director, Intercultural and International Life
Brisa B. Zubia, BA-Administrative Assistant, Intercultural \& International Life

## Library

Samuel G. Demas, BA, MA, MLS-College Librarian
Matthew S. Bailey, BA, MA, MLS-Media Librarian and Reference \& Instruction Librarian for Arts
Vicki L. Burgess, BS-Acquisitions Specialist
Katherine A. Cooper-Interlibrary Loan Specialist

Jennifer Edwins, BA-Assistant to the College Librarian \& Loan Services Manager
Carol Eyler, AB, MLS-Head of Technical Services
Anita Grommesh, BS-Acquisitions Manager
Merry L. Hoekstra, BA-Administrative Assistant to the College Librarian
Iris M. Jastram, BA, MA,-Reference \& Instruction Librarian for Languages and Literature
Christine R. Jensen, BA-Interlibrary Loan Specialist
Terese L. Kissner, BS-Collection Development \& Preservation Specialist
Thomas A. Lamb, BA, MS, MS-Cataloging \& Metadata Librarian
Danya E. Leebaw, BA, MS-Reference \& Instruction Librarian for Social Sciences
Hsianghui Liu-Spencer, BA, MEd, MLS-Cataloging \& Digital Services
Veronica Otte-Reserves Coordinator
Kristin L. Partlo, BA, MA-Reference \& Instruction Librarian for Social Sciences \& Data
Lois Perkins, BA-Circulation Specialist
Margaret R. Pezalla-Granlund, BA, MA-Curator of Library Art \& Exhibitions
Charles F. Priore, BA, MLS-Reference \& Instruction Librarian for Sciences
Carolyn Sanford, BA, MA-Head of Reference and Instruction
Kathleen Schwartz-Cataloging Specialist
Christina A. Sinkler-Miller, BA-Periodicals \& E-Journals Librarian
Sandra Smith-Circulation \& Shelving Specialist
Kathy E. Tezla, BA, MA, MLS-Head of Collection Development
Carol R. Thunem, BMEd, MM-Periodicals Specialist
Heather Tompkins-Ref \& Instr Librarian for Humanities \& Govern. Publications
Kristi R. Wermager, BA, MA-Bibliographer \& Curator of Special Collections
Nathaniel J. Wilson, BA, MA, MIS-Library Technology Coordinator
Ann Zawistoski, BA, MS-Reference \& Instruction Librarian for Sciences

## Mail Services

Tracy E. Barron-Mail Services Coordinator
Jackie M. McBeain, AA-Mail Services Assistant

## Maintenance

Kathryn J. Beckers, AA-Maintenance Administrative Assistant

## Math Skills Center

Russell J. Petricka, BA, MAT-Supervisor of the Math Skills Center

## Mathematics

Susan L. Jandro-Administrative Assistant in Mathematics
Michael N. Tie, BS-Technical Director in Mathematics

## Media and Public Relations

Eric Sieger, BA, MA-Director of Media Relations and Public Relations
Jessica J. Paxton, BA-Media Relations Assistant
Middle Eastern Languages
Marian J. Sherwin, BS-Administrative Assistant in Middle Eastern Languages
Music
Susan M. Beeby, BA, MLIS-Music Collections Curator
Hong G. Dice-Performance Activities Coordinator in Music
Carole D. Engel-Administrative Assistant in Music

## Nutting House

Laurie S. Brackee-Nutting House Operations Manager
Off Campus Studies Office
Helena I. Kaufman, BA, MA, PhD-Director of Off-Campus Studies
Sean E. Green, BA-Administrative Assistant for Off-Campus Studies

Leslie A. Vanderwood, BA-Off-Campus Studies Program Coordinator
Naomi J. Ziegler, BA, MA, MS, PhD-Assistant Director of Off Campus Studies

## Office of Student Fellowships

Elizabeth J. Ciner, BA, MA, PhD-Director of Student Fellowships
Perlman Learning/Teaching Center
Charlene Hamblin-Administrative Assistant to Director, Perlman Center for Learning \& Teaching

## Philosophy

Sandra R. Saari, BS-Administrative Assistant in Philosophy

## Physical Education, Athletics, Recreation

Laura Kay G. Allen, BA, MA, EdS, EdD-Building Supervisor, Recreation Center and Building Supervisor, Recreation Center

Rebecca J. Carel-Building Supervisor, Recreation Center
Aaron J. Chaput, BA, MEd-Assistant Director, Recreation Center \& Club Sports Director
Ross Currier-Building Supervisor, Recreation Center
Richard H. Douglass-Building Supervisor, Recreation Center
Catherine L. Funke, BA, MA-Assistant Women's Cross Country \& Track Coach
John Gray-Building Supervisor, Recreation Center
Martin G. Hoffmann, BA, MA-Assistant Football Coach
Donald E. Janke-Building Supervisor, Recreation Center
Linda K. Luedke, AA-Administrative Assistant in Physical Education, Athletics \& Recreation
Karen S. Montgomery, BA-Building Supervisor, Recreation Center
Robert G. Pagel-Assistant Football Coach/Defensive Coordinator
Carlin Shoemaker, BA-Assistant Football Coach
Michele L. Showers, BS-Director of Recreational Sports \& Manager Recreation Center

## Physics and Astronomy

Thomas R. Baraniak-Electronics \& Laboratory Manager in Physics \& Astronomy
Mary S. Drew, BA-Administrative Assistant in Physics and Astronomy and Science Initiative Administrative Assistant

Bruce S. Duffy, BS-Technical Assistant in Physics and Astronomy
Mark J. Zach, BSME-Instrument Project Manager

## Political Science

Patricia K. Peterson, BS-Administrative Assistant in Political Science

## Pre-Med Advising

Pamela Middleton, BA, PhD-Pre-Health Advisor
President's Office
Steven Poskanzer, AB, JD-President
Vickie L. Duscher-Receptionist and Scheduler
Elise A. Eslinger, BA, MBA-Associate Vice President and Chief of Staff
Stephanie A. Huston, BS-Administrative Assistant and Travel Coordinator
Jane A. Nelson-Secretary to the Board of Trustees \& Assistant to President
Printing Services
Corwyn L. Pulju-Duplicating Assistant
Loretta Springer-Duplicating Coordinator

## Psychology

Anne M. Fossum-Animal Care Supervisor
Lorie L. Tuma, BA-Administrative Assistant in Psychology and Cognitive Science

## Publications Office

Teresa Scalzo, BA-Director of Publications
Kristi K. Anderson, BA-Graphic Designer
Kayla M. Berger, BA-Production Assistant and Writer/Editor

Marla J. Holt, BA-Writer/Editor
Jonathon L. Reese-Graphic Designer

## Registrar's Office

Roger A. Lasley, BA, MA-Registrar
Candace I. Braun-Academic Records Coordinator
Evelyn Johnson-Registration Coordinator
Ann M. May-Transcript Coordinator \& Senior Administrative Assistant to Registrar
Cindy Plash-Certification Coordinator

## Religion

Sandra R. Saari, BS-Administrative Assistant in Religion

## Residential Life

Steve Wisener, BA, MEd-Director of Residential Life
Chloe Coenen, BA, MS-Hall Director Myers/Nourse
Vicky K. Deering-Administrative Assistant/Data Specialist
Danica M. Lance-Hall Director, Cassat and Memorial
Carrie L. Morris, BA, MS-Hall Director Burton/Davis/Severance
Kari L. Scheurer-Administrative Assistant/Project Specialist
Amy L. Sillanpa, BS, MS-Associate Director of Residential Life
Melissa I. Stauffer-Hall Director/Musser \& West Side Houses
Isaiah J. Thomas, BA, MA-Hall Director Evans and Goodhue

## Science Education Resource Center

Cathryn A. Manduca, BA, MS, PhD-Director, Science Education Resource Center
Monica Z. Bruckner, BA, MS-Web Content Developer \& Evaluation Assistant
Sean Fox, BA, MS-Technical Director in SERC
Linda M. Goozen, BS-Administrative Assistant in Science Education Resource Center

Ellen Iverson-Evaluation Director

Karin B. Kirk-Geoscience Assistant

Jon A. Lee-SERC Office Manager

John McDaris-Geoscience Assistant
Carol J. Ormand-Geoscience Assistant

## Security

Wayne Eisenhuth, BS-Director of Security Services
Randall R. Atchison-Security Shift Supervisor
Sharon M. Becker-Security Shift Supervisor

James Bushey-Security Shift Supervisor
Klay Christianson, BA-Security Shift Supervisor
Chad G. Drazkowski, AA-Security Officer
Steven R. Hanson, BS-Security Shift Supervisor
Ryan J. Holicky, AAS-Security Officer
Noel C. Williams-Security Shift Supervisor

## Sociology and Anthropology

Elizabeth O. Musicant, BA, MA-Administrative Assistant, Sociology and Anthropology

## Spanish

Mary Tatge-Administrative Assistant in Spanish

## Sports Information

David S. Pape, BA-Sports Information Director

## St. Olaf

Charles F. Priore, BA, MLS-Science Librarian

## Stewardship

Marin K. Amundson-Graham, BA-Associate Director of Stewardship
Sarah J. Forster, BA, MA-Director of Stewardship
Christine Krejci, BS-Stewardship Coordinator

## Student Activities

Lee F. Clark, AA, BS, MA,-Director of Student Activities
Gretchen K. Fierke-Cave Management
Michael K. Morris, BA-Cave Management
Justin R. Plank-Cave Management
Nadine D. Sunderland-Assistant Director of Student Activities

## Student Financial Services

Rodney M. Oto, BA, EdM-Director of Student Financial Services
Cynthia Diessner, BA-SFS Office Assistant/Loan Specialist
Dana L. Edwards-Assistant to the Director of Student Financial Services
Michael Kotchevar, BS-Senior Assistant Director of Student Financial Services
Revae K. Nelson, BA-Assistant Director of Student Financial Services
Kris O. Parker, BA-Assistant Director of Student Financial Services
Elizabeth J. Rowley, BS-Application \& Processing Specialist/Administrative Assistant
Summer Academic Programs
Jeremy M. Updike, BS-Director of Summer Academic Programs
Charlene Hamblin-Administrative Assistant to the Director of Summer Academic Programs
TRIO-SSS Program
Susannah J. Shmurak, BA, MA, PhD-Writing Assistant/Database Manager
Telecommunications

Deborah T. Ludwig-Telecommunications Specialist
Mary Ann Wroblewski, AAA-Telecommunications Specialist

## The Language Center

Cynthia L. Shearer, BA, MA-Director of the Language Center
Mary H. Nelson, BA-Assistant to the Director of the Language Center

## Theater \& Dance

Patricia J. Germann-Administrative Assistant, Theater and Dance
Mary Ann Kelling, BA, MFA-Costume Designer and Shop Supervisor
Allison M. Koster, BA, MFA-Assistant Technical Director/Lighting Designer

## Vice President and Treasurer

Frederick Rogers, BA, MS-Vice President and Treasurer
Daniel R. Bergeson, BA-Director of Auxiliary Services \& Special Projects
Megan M. Bosco, BS-Senior Investment Analyst
Andrew D. Christensen, BS, MBA-Investment Manager
Elizabeth J. Hubbard-Assistant to the Vice President and Treasurer
Patricia M. Langer, BS, MA-Budget Analyst
Jason B. Matz, BS, MBA-Director of Investments
Kelly M. Roehl-Administrative Assistant for Business and Finance
Varsha Seetharam, BA-Investment Operations Analyst

## Vice President for External Relations

Gayle A. Bauer-Assistant to Vice President/External Relations \& Office Manager

## Voice Publications

Janice Senn, BS, MA-Managing Editor of the Voice
Web Services

Jaye E. Lawrence, BA-Director of Web Communications and Development
Douglas Bratland, BA-Web Writer
Matthew D. Ryan, BA-Associate Director of Web Communications Development
Nathan A. White, BA-Web Application Developer

## Wellness Center

Marit Lysne, BA, MA, PsyD-Director of the Wellness Center
Andrew E. Christensen, BA, EdM-Coordinator of Disability Services
Anne M. Fossum-Receptionist Wellness Center
Jennifer L. Gildner, BS, MS, PhD-Counseling Psychologist
Denise M. Intihar-Lum, FNP, MSN, BSN-Family Nurse Practitioner
Natalee J. Johnson-Advanced Practice Nurse/Coordinator of Medical Services
Anna M. Mellgren, RN, BSN, MS, CNP-Adult Nurse Practitioner
Sherryl D. Regenscheid-AdministrativeAssistant/Student Insurance Specialist
Andrew C. Weis, BS, MS, PhD, LP-Clinical Psychologist

## Women's and Gender Studies

Tamara S. Little-Administrative Assistant in Women's and Gender Studies
Writing Program
Carol A. Rutz, BA, MA, PhD-Director of the College Writing Program
Elizabeth O. Musicant, BA, MA-Assistant to the Director of the College Writing Program
Gudrun A. Willett, BA, MA, PhD-Project Director, Writing Program

