## Carleton College 2013-2014 Academic Catalog

Carleton's Academic Catalog is produced by the Office of the Registrar.
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

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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, 2012, the College had an endowment of $\$ 646$ million and assets valued at $\$ 1,003$ 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 2,035 (Fall 2012) 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, 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1411. 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 Vice President for Student Development and 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 Vice President/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 enrolling about 2,000 with a diverse student body and a distinguished faculty.

Carleton enrolls a significant number of National Merit Scholars, 76 in the class that enrolled in 2012, or 14 percent of the first-year class. In 2012, Carleton was ranked first among national liberal arts colleges in the number of National Merit Scholars in the first-year class.

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 2009. In that period, according to the National Science Foundation Survey of Earned Doctorates, graduates of Carleton earned 2770 academic doctoral degrees, including: 524 degrees in the life sciences, 497 in the humanities, 447 in the physical sciences, 362 in the social sciences, 214 in psychology, 200 in the geosciences, and 156 in education. In the period 2000 to 2009, Carleton ranked fifth among all national colleges and universities for the number of doctoral degrees earned when adjusted for the number of graduating seniors.

In fall of 2012-2013 42 percent of Carleton's 2,035 students came from the Midwest, 20 percent from the West, 20 percent from the East, 8 percent from the South, and 10 percent from outside the United States. Approximately 22 percent are African American, Asian, Native Hawaiian/Pacific Islander, Hispanic, Native American or of two or more races. 56 percent of Carleton students receive institutional need-based aid. Carleton has 211 full-time faculty, and all permanent faculty 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 2012,64 percent of class sections had under 20 students, and no classes had over 50 students. Each year, students can choose from approximately 1000 courses in 33 majors and several interdisciplinary programs. 73 percent of students in the 2012 graduating class participated in off-campus study for Carleton credit at least once during their undergraduate years, with study in 49 countries.

In the fall of 2012, 97.7 percent of the cohort of 2012 first-year students returned to Carleton. In accordance with the Higher Education Act of 1965, as amended, the six-year graduation rate for the cohort that entered in fall, 2006 is 93.8 percent, and 90.9 percent of that cohort graduated in four years or less. Of the cohort that entered in fall 2004, 94.0 percent 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, 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-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 1917-residence 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 1927residence 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, 400meter, all-weather 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 1958residence 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 1964basketball 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 Middle Eastern Languages, 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.

Cassat and James 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 James Hall. Both halls have been designed with an eye toward sustainability and include numerous shared spaces to encourage community life and innovative features.

Weitz Center for Creativity 2011—a facility geared toward creative collaboration supporting multiple student and classroom projects and allowing 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, the Learning and Teaching Center and a coffee shop. The building is home to the Presentation, Events and Production Support (PEPS) office and the IdeaLab, a shared, interdisciplinary laboratory for exploring and learning to use technology.

## 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.

In 2004 the college constructed a 1.65 megawatt wind turbine. It was the first college-owned, utility scale wind turbine in the United States and over the life of the turbine it is expected to produce about 100-120 million kilowatt hours of clean energy. A second 1.6 megawatt wind turbine began providing power directly to Carleton's electrical grid in fall 2011.

Carleton recently completed a Climate Action Plan with the goal of becoming a carbon neutral campus by 2050. To support the Climate Action Plan, sustainability and climate change topics have been integrated into the curriculum along with many student work-study positions that are engaged in projects to advance on-campus sustainability initiatives at Carleton.

The College has a comprehensive recycling and compost program along with various car-sharing and public transportation opportunities around Northfield and to the Twin Cities. The College is committed to using the natural energy flows of the region to contribute to the sustainability of the community.

In keeping with Carleton values, two new residence halls built in 2009 meet LEED gold certification and the Weitz Center for Creativity has met the gold certification through the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program.

Cassat Hall and James Hall, with exteriors of durable brick, stone, and clay tile, are of an environmentally sustainable design, and earned a LEED gold certification based on 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 by utilizing energy from the sun to pre-heat supply water. Photovoltaic (PV) solar roof panels on James Hall convert energy from the sun into electricity to power the buildings.

Carleton chose not to demolish the historic old middle school when planning for the Weitz Center for Creativity, rather, entire sections of the original 1910 and 1934 structures were either preserved or recycled. The following materials have been reclaimed for use in the new facility: mosaic tile floor, ornate ironwork on a main staircase, wood from the bleachers in the former gym which was reused as wall covering, wood seats from the 1930s-era auditorium which appear as a sculpture installation on the ceiling leading to the new cinema, much of the original woodwork and trim, and slate from the original blackboards. Other details that helped the Weitz Center for Creativity achieve LEED gold certification include:

- Incorporating 75 percent of the existing walls and floors from the original buildings into the new design;
- Diverting more than 98 percent of construction materials from landfills, meaning they will be reused on site or recycled;
- Re-insulating all existing exterior walls and ceilings;
- Replacing all existing windows with new, energy-efficient windows;
- Installing automated, high-efficiency lighting systems and occupancy sensors in hallways, classrooms, and common areas;
- Using high-efficiency heating and cooling systems;
- Minimizing water consumption through low-flow plumbing fixtures, water-efficient landscaping, and a storm-water-capture system for irrigation;
- Using paint, adhesives, and carpeting that emit low levels of volatile organic compounds;
- Using regionally manufactured materials when possible.


## 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

To receive a Bachelor of Arts degree from Carleton, a student must earn at least 210 credits and a cumulative grade average of $C$ (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 and an integrative exercise within the 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, global citizenship (international studies, intercultural domestic studies, and demonstrate proficiency in a second language), and complete four terms of physical education. 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 enrolled at Carleton.

## General Education: (AI, Curricular Exploration, Global Citizenship, Writing, QRE and PE)

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

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.

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.

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.

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.

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.

## Global Citizenship

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.

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) - $\mathbf{6}$ 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.

## 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.

## 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.

## 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. For a course to count toward the major, a grade of C- or better must be earned; these courses cannot be taken on an elective S/CR/NC basis. Departments may make exceptions for extra-departmental courses if appropriate. 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.

The following majors are available at Carleton: African/African-American Studies, American Studies, Art History, Art (Studio), Asian Studies, Biology, Chemistry, Cinema \& Media Studies, Classics, Computer Science, Economics, English, Environmental \& Technology Studies, French \& Francophone Studies, Geology, German, History, Latin American Studies, Linguistics, Mathematics, Mathematics: Statistics, Music, Philosophy, Physics, Political Science, Political Science/IR, Psychology, Religion, Russian, Sociology/Anthropology, Spanish, Theater Arts, Women's and Gender Studies.

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 Campus Handbook 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; $\mathbf{C = S a t i s f a c t o r y}$ work that is 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; $\mathbf{F}=$ Failing 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 2.0 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 the student cannot otherwise graduate in twelve terms, 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 may be earned during the summer on approved off-campus study programs.

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 in the class of 2014 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). Beginning with the class of 2015, honors will be awarded to students with a grade point average in the top 2 percent of their graduating class (summa cum laude), those in the remainder of the top 15 percent (magna cum laude), and those in the remainder of the top 30 percent (cum laude).

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 on the department Web site.

## 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
- 298 Junior Colloquium
- 300-389 Advanced
- 390 Independent Reading
- 391 Independent Study
- 392 Independent Research
- 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 Argument and Inquiry, Curricular Exploration, Writing, Quantitative Reasoning Encounter, or Global Citizenship 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. In some cases, it can be an academic follow-up to an internship experience. 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.

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 link will allow you to search for pertinent courses in Academic Civic Engagement: Applied (SPECINTAPPACAD); Book Studies (SPECINTBOOKSTD); Studies in Ethics (SPECINTETHICS) ; Health Issues (SPECINTHEALTH) ; Legal Studies (SPECINTLEGAL); Philosophy of Science (SPECINTPHILSCI); Social Thought (SPECINTSOCTHGHT); or Sustainability Theoretical (SPECINTTHEOACAD) Sustainability (SPECINTSUSTAIN):
http://apps.carleton.edu/campus/registrar/schedule/.
Concentrations: A concentration is an integrated interdisciplinary program of study that provides structure for exploring fields that do not have a single methodological or content base in a traditional discipline. Concentrations promote communities of learning beyond the major and encourage students to make connections across disciplines. They may also provide an opportunity for students to bring focus to their choice of electives. Concentrations may strengthen and complement a student's major by extending its content and 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.

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)
- $\quad$ ARP $=$ Arts Practice ( 6 credits required)
- $\quad$ FSR $=$ Formal or Statistical Reasoning ( 6 credits required)
- $\mathrm{HI}=$ Humanistic Inquiry (6 credits required)
- IDS $=$ Intercultural Domestic Studies (6 credits required)
- $\operatorname{IS}=$ International Studies ( 6 credits required)
- $\mathrm{LA}=$ Literary/Artistic Analysis (6 credits required)
- $\mathrm{LS}=$ Science with Lab (6 credits required)
- $\mathrm{NE}=$ No Exploration Credit
- $\quad$ QRE = Quantitative Reasoning Encounter (3 courses required)
- $\mathrm{SI}=$ Social Inquiry ( 6 credits required)
- WR1 = Designates the Writing Component of an AI Seminar
- $\quad$ WR2 $=$ 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)
- $\mathrm{MS}=$ Mathematics and Natural Sciences (18 credits required)
- RAD = Recognition and Affirmation of Difference
- $\mathrm{WR}=$ Writing Rich
- $N D=$ No Distribution Credit


## Departments of Instruction

## AFRICAN/AFRICAN AMERICAN STUDIES (AFAM)

The program in African and African American Studies provides a cross-culturally and historically comparative framework to study the rich connections and exchanges among

African people, their descendants, and the various "new worlds" in which they have made and are making their lives. A particular strength of Carleton's African and African American Studies program is the opportunity to explore these issues both on the African continent and in numerous African diasporas--of varying historical depth--in the Americas, Europe, Asia, and the Middle East. African and African American Studies combines area studies and ethnic studies foci on the cultural, literary, political, social, and intellectual responses to slavery, colonialism, missionization, and racialization throughout Africa and its many diasporas.

Students can pursue their intellectual interests in Africa and its diasporas through oncampus courses and off-campus studies programs (including four programs offered through Carleton's departments of French and Francophone Studies, History, and Environmental Studies), and through a rich variety of courses in nearly all curricular exploration divisions. Through multidisciplinary training, students are encouraged to develop their analytic, research, and literary skills; they acquire the intellectual tools to critique and correct the distortions and silences about Africans and their descendants in both academic canons and public discourse.

The African and African American Studies major thus prepares students for lifetime engagement in scholarship as well as in fields such as law, public policy, education, public health, social work, and the arts. Toward this end, and in addition to coursework, students are encouraged to take advantage of the rich array of speakers, exhibits, co-curricular, and extracurricular activities related to Africans and their diasporas.

Students majoring in African and African American Studies create their own program of study by choosing courses in a structured and reflective manner from a variety of disciplinary departments. In developing their program, students should talk to the department about courses that have particularly high African, African Diaspora, and/or African American Studies content. They are particularly encouraged to choose these courses from among the list of relevant courses. Courses marked AFAMPERT can complement the major, but do not count toward the required nine courses plus comprehensive exercise without special permission of the Program Director. Because of the complexities of creating a meaningful program from a wide array of departmental offerings, students interested in majoring should draw up a program of study that has breadth and depth in consultation with the Director of African and African American Studies before declaring their major.

Students must complete at least one interdisciplinary course offered by the
African/African American Studies program, three survey courses introducing the "state of the field" of African and/or African Diaspora studies within specific disciplines, and at least five 200- and 300 -level distribution courses. Among these distribution courses, students choose at least one course each from among the humanities, social sciences and arts and literature; at least four of the distribution courses must be at the 200-level or above and at least one at the 300 -level.

The African and African American capstone experience, the two-credit AFAM 398 course, consists of a portfolio and reflective essay drawing together the student's work in the major. The comprehensive exercise is a substantial (approximately 34-40 page) research paper grounded in two complementary disciplines, advised by two faculty members chosen from these two disciplines.

## 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. Interdisciplinary Course ( 6 credits). Each student must complete one interdisciplinary

6-credit course which, in part, specifically discusses African/African American Studies as a discipline:

AFAM 113 Introduction to African/African American Studies (Not offered in 2013-2014)
AFAM 130 African American Social Movements (Not offered in 2013-2014)
AFAM 182 Black Identity and Belonging
AFAM 194 The Black Middle Class
III. Survey Courses ( 18 credits). Each student must take three of the following 6 -credit courses:

ENGL 117 African American Literature
HIST 125 African American History I
HIST 126 African American History II
HIST 180 An Historical Survey of East Africa (Not offered in 2013-2014)
HIST 181 West Africa in the Era of the Slave Trade (Not offered in 2013-2014)
HIST 182 Living in the Colonial Context: Africa, 1850-1950
HIST 183 History of Early West Africa (Not offered in 2013-2014)
HIST 184 Colonial West Africa (Not offered in 2013-2014)
IV. Distribution Courses ( 30 credits). Each student should take 30 credits of distribution that are essential to African and African-American Studies. Among these distribution courses, students must choose at least one 6 -credit course each from among the three disciplinary groups: humanities, social sciences and arts and literature; at least four of the distribution courses must be at the 200 -level or above and at least one at the 300 -level. The 300 -level course should be completed in one of the two disciplines in which the student writes his/her comprehensive exercise; in this course the student must produce a substantial paper or project in African and/or African American Studies. In addition, majors are highly encouraged to take the AMST 345 junior methods course. HIST 182 cannot double count as a survey course.

Arts and Literature
ENGL 238 African Literature in English
ENGL 243 Text and Film (Not offered in 2013-2014)
ENGL 252 Caribbean Fiction
ENGL 258 Contemporary American Playwrights of Color
ENGL 350 The Postcolonial Novel: Forms and Contexts (Not offered in 2013-2014)
FREN 235 Francophone Literature of Africa and the Caribbean (Not offered in 20132014)

FREN 245 Francophone Literature of Africa and the Caribbean
MUSC 332 Motown Humanities
HIST 100 American Antebellum Slavery: History and Historians
HIST 181 West Africa in the Era of the Slave Trade (Not offered in 2013-2014)
HIST 276 The African Diaspora in Latin America (Not offered in 2013-2014)
HIST 280 African in the Arab World (Not offered in 2013-2014)
HIST 281 War in Modern Africa (Not offered in 2013-2014)
HIST 282 Masquerades in Africa (Not offered in 2013-2014)
HIST 286 Africans in the Arab World: On Site and Revisited (Not offered in 2013-2014)
HIST 322 Civil Rights and Black Power (Not offered in 2013-2014)
Social Sciences
AFAM 130 African American Social Movements (Not offered in 2013-2014)
AFAM 194 The Black Middle Class

EDUC 225 Issues in Urban Education (Not offered in 2013-2014)
ENTS 264 Tanzania and Ethiopia Program: Agriculture and Rural Livelihoods in SubSaharan Africa (Not offered in 2013-2014)
ENTS 280 Tanzania and Ethiopia Program: Research Projects on Conservation and Development (Not offered in 2013-2014)
ENTS 284 Tanzania Program: Cultural Studies (Not offered in 2013-2014)
ENTS 285 Tanzania and Ethiopia Program: Wildlife Conservation and Livelihoods (Not offered in 2013-2014)
POSC 266 Urban Political Economy
POSC 306 How Race Matters in American Politics* (Not offered in 2013-2014)
POSC 351 Political Theory of Martin Luther King, Jr. (Not offered in 2013-2014)
POSC 366 Urban Political Economy* (Not offered in 2013-2014)
PSYC 384 Psychology of Prejudice
SOAN 272 Race and Ethnicity in the United States
SOAN 395 Ethnography of Reproduction (Not offered in 2013-2014)
Additional Distribution Electives: Arts Practice
DANC 301 Contemporary Styles and Techniques: African Dance
MUSC 183J Ethnic Drumming Instruction (Juried)
MUSC 192 West African Drum Ensemble
MUSC 193 African Mbira Ensemble (Not offered in 2013-2014)
MUSC 195 Jubilee Singers
MUSC 199 African Drum Class
V. Senior Seminar/Capstone Experience (2 credits)

The capstone experience consists of AFAM 398, a two-credit course in which the student creates a portfolio of their work in African and African American studies and writes a 5-10 page reflective essay tying these papers together. This course gives students an opportunity to seriously reflect about the courses they have taken and the work they have produced within the major, and to draw connections among them. The two-credit course is offered by the Director or another member of the program core faculty. If there are not enough students in a particular year to offer AFAM 398 as a course, it will be offered as a tutorial. Even in that case, if multiple students are completing their major or concentration in the same year, they will strive to take the tutorial simultaneously to facilitate common discussion of the main themes in African and African American Studies and how they are woven through the corpus of each student's undergraduate opus.
VI. Comprehensive Exercise ( 6 credits): AFAM 400

The comprehensive exercise is a substantial (approximately 34-40 page) research paper on a topic within African, African American, and/or African Diaspora studies, grounded in two complementary disciplines, advised by two faculty members chosen from these two disciplines. The student should have completed a 300-level course in one of these two disciplines. The comps process begins with a proposal in fall term of the senior year, and ends with a final written thesis and oral presentation early in spring term.

## African/African American Studies Courses

113. Introduction to African/African American Studies This core course employs interdisciplinary approaches to critically examine selected intellectual and cultural themes in African, African American, and Black Diaspora studies. The course combines lecture and discussion formats. Members of the faculty deliver guest lectures in their own areas of specialization. Themes may vary from year to year. 6 credits, $A L, W R, R A D$; HI, WR2, IDS, Not offered in 2013-2014
114. African American Social Movements Social movements have played a critical role in African American communities, as both struggles for freedom and liberation as well as struggles for identity and recognition. This course examines several specific social movements, including the Civil Rights Movement, Black Power movement, and Black Feminism, among others, from multiple disciplinary perspectives. We will examine these movements comparatively through the disciplinary lenses of history, sociology, political science, and communication studies, and consider their trajectory through the contexts within which they emerge and develop. We will also evaluate these movements in terms of participants' social identities as well as movements' varying ideologies. 6 credits, SS; SI, IDS, Not offered in 2013-2014
115. Black Identity and Belonging In his essay "Of Our Spiritual Strivings," W.E.B. Du Bois famously asked "how does it feel to be a problem?" Referring to the socio-cultural contradictions that plagued black American life at the turn of the twentieth century, Du Bois' question has sparked debates on black identity and belonging in both international and domestic contexts. This course surveys the writings of people of African descent as they have historically grappled with the question of what it means to be black. We insert black intellectual voices into important sociological, anthropological, and philosophical debates on issues of race, gender, diaspora, and national belonging. 6 credits, SI, IDS, Fall-L. Beck
116. The Black Middle Class Since the 1960s, the black middle class has been an object of debate and interest, both among scholars and in society. In this course, we will examine the black middle class from an interdisciplinary perspective, specifically considering questions and problems posed in economics, sociology, history and literature. Among other topics, we will examine when and how the black middle class emerged, its distinctiveness from its white and working-class counterparts, and its implications and larger meaning in popular culture and public discourse about race, class, and American society. 6 credits, SI, IDS, Spring-D. Williams
117. African and African American Studies Capstone What relationships can you draw among your varied coursework and papers in African and African American Studies? How does interdisciplinarity affect your thinking about the study of the African continent and its numerous diasporas? In this two-credit course students will create a portfolio of their work in African and African American studies and write a 5-10 page reflective essay tying these papers together. Guided by a faculty member, this course gives students an opportunity to reflect seriously about the courses they have taken and the work they have produced within the major or concentration, and to draw connections among them Prerequisite: Senior African/African American Studies major or concentrator. 2 credits, ND; NE, Fall, Winter, Spring-Staff
118. Integrative Exercise 6 credits, $S / N C$, ND, Winter-Staff

## Other Courses Pertinent to African/African American Studies

AMST 396 Gated Communities and Slums: Globalizing the American City
ECON 240 Microeconomics of Development
EDUC 238 Multicultural Education: Race, Gender and Education
EDUC 353 Schooling and Opportunity in American Society (Not offered in 2013-2014)
ENGL 234 Literature of the American South
HIST 120 Rethinking the American Experience: American History, 1607-1865 (Not offered in 2013-2014)
HIST 121 Rethinking the American Experience: American Social History, 1865-1945 (Not offered in 2013-2014)
HIST 214 Rethinking the American Civil War
HIST 229 Working with Gender in U.S. History
MUSC 136 History of Rock
POSC 122 Politics in America: Liberty and Equality
POSC 355 Identity, Culture and Rights*
WGST 110 Introduction to Women's and Gender Studies

## AFRICAN/AFRICAN AMERICAN STUDIES CONCENTRATION

The African and African American Studies concentration is designed to complement a student's disciplinary major through an interdisciplinary specialization on the contexts and experiences of Africans and their many diasporas. Combining area studies and ethnic studies foci, the African and African American Studies concentration provides students the opportunity to explore the rich connections and exchanges among African people, their descendants, and the global locales--in the Americas, Europe, Asia, and the Middle East--in which they have made and are making their lives. Students can do this through both oncampus courses and off-campus studies programs.

Fostering interdisciplinary critical thinking, the African and African American Studies concentration prepares students for lifetime engagement in scholarship as well as in fields such as law, public policy, education, public health, social work, and the arts. Toward this end, and in addition to coursework, students are encouraged to take advantage of the rich array of speakers, exhibits, co-curricular, and extracurricular activities related to Africans and their diasporas.

## Requirements for the Concentration

The African/African American Studies Concentration requires seven courses as follows:

One interdisciplinary course with an "AFAM" designation;
Two survey courses that introduce the "state of the field" of African and/or African Diaspora studies within specific disciplines;

Three distribution courses (from the list of relevant courses) chosen from at least two of the following disciplinary groups: Arts and Literature; Humanties; Social Sciences. Two of the three distributional courses must be at the 200-level or above. At least one of the distribution courses should be a 300-level course in which the student produces a substantial paper or project in African and/or African American Studies. In rare cases, a student can petition to write a substantial paper in a 200 -level course (i.e., be released from the 300-level course requirement), if that course is highly relevant to their own focus.

The capstone experience consists of AFAM 398, a two-credit course in which the student creates a portfolio of their work in African and African American studies and writes a 5-10 page reflective essay tying these papers together. This course gives students an opportunity to seriously relfect about the courses they have taken and the work they have produced within the concentration, and to draw connections among them. The two-credit course is offered by the Director or another member of the program core faculty. If there are not enough students in a particular year to offer AFAM 398 as a course, it will be offered as a tutorial. Even in that case, if multiple students are completing their major or concentration in the same year, they will strive to take the tutorial simultaneously to facilitate common discussion of the main themes in African and African American Studies and how they are woven through the corpus of each student's undergraduate opus.

Concentrators are highly encouraged to take the AMST 345 junior methods course.
Structure of Courses Applicable to the Concentration
Interdisciplinary Course (6 credits). Each student must complete one interdisciplinary 6credit course which, in part, specifically discusses African/African-American Studies as a discipline.

AFAM 113 Introduction to African/African American Studies (not offered in 2013-14)
AFAM 130 African-American Social Movements (not offered in 2013-14)
AFAM 182 Black Identity and Belonging
AFAM 194 The Black Middle Class

Survey Courses (12 credits). Each student must take two of the following 6-credit courses:

ARTH 140 African Art and Culture (not offered in 2013-14)
ENGL 117 African American Literature
HIST 125 African American History I
HIST 126 African American History II
HIST 183 History of Early West Africa (not offered in 2013-14)
HIST 184 Colonial West Africa (not offered in 2013-14)
Distribution Courses ( 18 credits). Each student should take 18 credits chosen from at least two of the following disciplinary groups: Arts and Literature, Humanities and Social Sciences including one six-credit course which must be at the 300-level.

Arts and Literature
ENGL 238 African Literature in English
ENGL 243 Text and Film (not offered in 2013-14)
ENGL 252 Caribbean Fiction
ENGL 258 Contemporary American Playwrights of Color
ENGL 350 The Postcolonial Novel: Forms and Contexts (not offered in 2013-14)
FREN 235 Francophone Literature of Africa and the Caribbean (not offered in 2013-
14)

FREN 245 Francophone Literature of Africa and the Caribbean
FREN 250 Film and Society in Mali (not offered in 2013-14)
FREN 251 Negotiating the Past--the Challenges of Nation-Building in Mali (not offered in 2013-14)

FREN 252 Literature and Society in Mali (not offered in 2013-14)
FREN 308 France and the African Imagination (not offered in 2013-14)
MUSC 130 History of Jazz
MUSC 131 The Blues From the Delta to Chicago (not offered in 2013-14)
MUSC 132 Golden Age of R and B
MUSC 245 Music of Africa
MUSC 332 Motown
Humanities
HIST 100 American Antebellum Slavery
HIST 219 Is Obama Black? American Mixed-Race History
HIST 276 The African Diaspora in Latin America (not offered in 2013-14)
HIST 280 African in the Arab World (not offered in 2013-14)
HIST 281 War in Modern Africa (not offered in 2013-14)
HIST 282 Masquerades in Africa (not offered in 2013-14)
HIST 286 Africans in the Arab World: On Site and Revisited (not offered in 2013-14)
HIST 322 Civil Rights and Black Power (not offered in 2013-14)
HIST 381 History, Memory and the Atlantic World: Ghana and the United States (not offered in 2013-14)

HIST 382 History, Memory, and the Atlantic World: On Site and Revisited (not offered in 2013-14)

RELG 227 Liberation Theologies
RELG 246 Religion and the Black Freedom Struggle (not offered in 2013-14)
RELG 247 RAP and Religion: Rhymes about God and the Good (not offered in 2013-
RELG 262 Islamic Africa (not offered in 2013-14)

RELG 330 Radical Pacifism Social Inquiry (not offered in 2013-14)
Social Sciences
EDUC 225 Issues in Urban Education (not offered in 2013-14)
ENTS 264 Agriculture and Rural Livelihoods in Africa (not offered in 2013-14)
ENTS 280 Tanzania Program: Research Projects on Conservation and Development (not offered in 2013-14)

ENTS 284 Tanzania Program: Cultural Studies (not offered in 2013-14)
ENTS 285 Wildlife Conservation and Livelihoods (not offered in 2013-14)
POSC 207 Urban Politics in a Global Era (not offered in 2013-14)
POSC 266 Urban Political Economy
POSC 306 How Race Matters in American Politics (not offered in 2013-14)
POSC 351 Political Theory of Dr. Martin Luther King (not offered in 2013-14)
POSC 366 Urban Political Economy (not offered in 2013-14)
PSYC 384 Psychology of Prejudice
SOAN 256 Ethnography of Africa (not offered in 2013-14)
SOAN 272 Race and Ethnicity in the United States
SOAN 395 Ethnography of Reproduction
Arts Practice
DANC 301 Contemporary Styles and Techniques: African Dance
MUSC 183J Ethnic Drumming Instruction (Juried)
MUSC 191 Karimba (not offered in 2013-14)
MUSC 192 West African Drum Ensemble
MUSC 193 African Mbira Ensemble (not offered in 2013-14)
MUSC 195 Jubilee Singers
MUSC 199 Class African Drum
Senior Seminar/Capstone Experience (2 credits)
The capstone experience consists of AFAM 398, a two-credit course in which the student creates a portfolio of their work in African and African American Studies and writes a 5-10 page reflective essay tying these papers together. This course gives students an opportunity to seriously reflect about the courses they have taken and the work they have produced within the concentration, and to draw connections among them.

## AMERICAN STUDIES (AMST)

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 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
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.)
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 History, 1607-1865 (Not offered in 2013-2014)
HIST 121 Rethinking the American Experience: American Social History, 1865-1945 (Not offered in 2013-2014)
HIST 122 U.S. Women's History to 1877
HIST 123 U.S. Women's History Since 1877
HIST 125 African American History I
HIST 126 African American History II
POSC 271 Constitutional Law I (Not offered in 2013-2014)
POSC 272 Constitutional Law II One-term survey courses:
AFAM 113 Introduction to African/African American Studies (Not offered in 2013-2014)
ARTH 160 American Art to 1940 (Not offered in 2013-2014)
ECON 232 American Economic History: A Cliometric Approach (Not offered in 20132014)

ENGL 212 Nineteenth-Century American Literature
ENGL 215 Modern American Literature
POSC 122 Politics in America: Liberty and Equality
RELG 140 Religion and American Culture
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 300-level 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 (Not offered in 2013-2014)

## American Studies Courses

100. Self-Invention, Deception, and American Identity The "self-made man" (or woman) is a paradigm of American culture. Achieving economic and social success through individual determination and a strong work ethic is central to the American dream. The notion of "self-made," however, has inspired individuals through the centuries to construct their identities in more literal ways. We'll explore lying and truth-telling, especially through self-invention and identity performance, to understand how self-performance is a recurring and enduring theme in the construction of American identity. Themes and concepts include pseudonymity, passing, impersonation, and hoaxes, especially as they overlap with issues of class, gender, ethnicity, race, age, and nationality. 6 credits, AI, WR1, Fall-A. Russek
101. 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, HU; HI, IDS, Spring-S. Akimoto, C. Clark
102. 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, AL, WR; HI, WR2, IDS, Fall-A. Estill, E. McKinsey
103. 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, ND, WR, RAD; SI, WR2, IDS, QRE, Not offered in 2013-2014
104. Investigative Tips for the Incurably and Globally Curious Whether you are an enterprising journalist, suspicious partner, or nosy neighbor, you'll love this introduction to the many tools used by investigative reporters. A veteran investigative journalist will demonstrate that no document is off limits, and no secret secure, from someone who is trained to dig up the dirt--and all in an ethical fashion! We'll use case studies, movie clips, and scavenger hunts in and around Northfield. The course will take a particular focus on reporting around the globe, with an emphasis on how local cultures, customs and geography affect the news gathering process. 1 credits, ND; NE, Not offered in 2013-2014
105. Music in the 1970s Frequently derided as a nadir of musical culture, the 1970s featured extraordinary musical creativity and change. In addition to the flowering of funk, soft rock, heavy metal, disco, 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. We'll approach these with deliberate interdisciplinarity, exploring the varied music and musical cultures through focused listening, analysis of period video and historic documents, and through the work of scholars from a variety of disciplines. No prior musical experience needed. 6 credits, $A L$, WR; SI, WR2, IDS, Winter-M. Russell
106. Diverse Bodies, One Nation How has the U.S. historically and culturally handled diversity? This course
looks at how difference has been negotiated, understood, legislated, represented. We will consider theoretical interventions into issues of race, ethnicity, gender, sexuality, and disability in order to better understand how embodiment matters to understandings of Americaness. 6 credits, HU, WR, RAD; SI, WR2, IDS, Not offered in 2013-2014
107. Beauty and Race in America In this class we consider the construction of American beauty historically, examining the way whiteness intersects with beauty to produce a dominant model that marginalizes women of color. We study how communities of color follow, refuse, or revise these beauty ideals through literature. We explore events like the beauty pageant, material culture such as cosmetics, places like the beauty salon, and body work like cosmetic surgery to understand how beauty is produced and negotiated. credits, ND, WR; HI , WR2, IDS, Offered in alternate years, Not offered in 2013-2014
108. 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 2013-2014
109. Beyond the Border: Latinos Across America The metaphor of the U.S.-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 U.S.? 6 credits, $A L, W R, R A D ; H I, W R 2, I D S, Q R E, N o t$ offered in 2013-2014
110. 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 2013-2014
111. 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 2013-2014
112. 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 2013-2014
113. Food Culture in the United States We explore the creation, exchange, and consumption of food in America, and the spaces in which it is produced, sold, shared, and eaten, focusing especially on food as a cultural artifact that is intricately tied to individual and group identification. We will study what Americans eat now, how American cuisine has changed, and how food is intertwined with ideas about cultural and national identity. We'll consider geography, home and community cooking, business and industry, and globalization in the formation and evolution of eating culture in the U.S. and ways in which food practices overlap with politics, power, and national identity. 6 credits, HU, RAD; SI, IDS, Fall-A. Russek
114. From Printing Press to iPhone: Technology in American Culture What is the role of the machine in American culture? Throughout U.S. history, Americans have both embraced mechanization and reviled it. This course asks how technological developments have helped give meaning to Americans social experiences
through various periods in U.S. history. The class will introduce students to central themes, methods, and exemplary American studies texts in an attempt to define (and redefine) American identity through the history of technological design. In the process, we will look at the influential role of technology on American history and culture through the lenses of gender, class, race, religion, disability, immigration, regionalism, and food. 6 credits, WR; SI, WR2, Winter-A. Russek
115. Utopia, Dystopia, and Myopia: Suburbia in Fiction and Scholarship 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; SI, IDS, Winter-R. Keiser
116. 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 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. 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. Prerequisite: Normally taken by majors in their junior year. African/African American Studies 113 or American Studies 115 or permission of instructor. 6 credits, NE, IDS, Winter-A. Estill
117. Gated Communities and Slums: Globalizing the American City Beyond white flight and suburbanization, the US has witnessed the "secession of the successful" in fortified, gated communities. The spatial concentration of poverty in slums has simultaneously occurred. Gates and favelas or shantytowns have appeared in Brazil, India, China, South Africa and other neoliberal economies. We will examine the diffusion of these placed identities and debate whether they are symbiotic or antithetical. Prerequisite: American Studies 115 or permission of the instructor. 6 credits, SS; SI, IS, Offered in alternate years, Spring-R. Keiser
118. 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—Staff
119. Integrative Exercise Seniors working on approved essays or projects in American Studies with the support of their advisers, will work independently to complete their theses, performances or projects to satisfy the college "comps" requirement. They will be required to give a public presentation on their papers or projects during the spring term. Prerequisite: American Studies 396. 3 credits, S/NC, Not offered in 2013-2014
120. Integrative Exercise Students read selected works and view films in the field of American Studies and in a special topic area designated by the program. For integrative exercise examination students only. Prerequisite: American Studies 396. 3 credits, S/NC, Winter-D. Appleman

## Topical Courses: Group I

AMST 214 Music in the 1970s
AMST 226 Latinas in Hollywood (Not offered in 2013-2014)
AMST 230 The American Sublime: Landscape, Character \& National Destiny in Nineteenth Century America (Not offered in 2013-2014)
AMST 240 The Midwest and the American Imagination (Not offered in 2013-2014)
ARTH 160 American Art to 1940 (Not offered in 2013-2014)
ARTH 171 History of Photography (Not offered in 2013-2014)
ARTH 240 Art Since 1945
ARTH 245 Modern Architecture (Not offered in 2013-2014)
ARTH 247 Architecture Since 1950

ARTH 333 Visual Culture and the Civil War
CAMS 188 Rock ' $n$ ' Roll in Cinema
CAMS 224 Classical American Film Comedy (Not offered in 2013-2014)
CAMS 225 Film Noir: The Dark Side of the American Dream
ENGL 117 African American Literature
ENGL 119 Introduction to U.S. Latino/a Literature (Not offered in 2013-2014)
ENGL 215 Modern American Literature
ENGL 223 American Transcendentalism (Not offered in 2013-2014)
ENGL 234 Literature of the American South
ENGL 235 Asian American Literature
ENGL 236 American Nature Writing
ENGL 247 The American West (Not offered in 2013-2014)
ENGL 248 Visions of California
ENGL 258 Contemporary American Playwrights of Color
ENGL 272 Truth vs. Power: A Journey in Journalism
ENGL 332 Studies in American Literature: Faulkner, Hemingway, and Fitzgerald (Not offered in 2013-2014)
MUSC 115 Music and Film (Not offered in 2013-2014)
MUSC 130 The History of Jazz
MUSC 131 The Blues From the Delta to Chicago (Not offered in 2013-2014)
MUSC 136 History of Rock
MUSC 247 The 1960s Folk Music Revival
MUSC 332 Motown
THEA 242 Twentieth Century American Drama

## Group II

AFAM 113 Introduction to African/African American Studies (Not offered in 2013-2014)
AFAM 130 African American Social Movements (Not offered in 2013-2014)
AFAM 182 Black Identity and Belonging
AMST 127 Introduction to U.S. Latino/a Studies (Not offered in 2013-2014)
AMST 215 Diverse Bodies, One Nation (Not offered in 2013-2014)
AMST 225 Beauty and Race in America (Not offered in 2013-2014)
AMST 227 Beyond the Border: Latinos Across America (Not offered in 2013-2014)
AMST 252 Food Culture in the United States
AMST 253 From Printing Press to iPhone: Technology in American Culture
CAMS 216 American Cinema of the 1970s (Not offered in 2013-2014)
CAMS 310 Moviegoing and Film Exhibition in America (Not offered in 2013-2014)
HIST 120 Rethinking the American Experience: American History, 1607-1865 (Not offered in 2013-2014)
HIST 121 Rethinking the American Experience: American Social History, 1865-1945 (Not offered in 2013-2014)
HIST 122 U.S. Women's History to 1877
HIST 123 U.S. Women's History Since 1877
HIST 125 African American History I
HIST 126 African American History II
HIST 205 American Environmental History
HIST 211 More than Pilgrims: Colonial British America (Not offered in 2013-2014)
HIST 212 The Era of the American Revolution
HIST 214 Rethinking the American Civil War

HIST 217 From Ragtime to Football: U.S. History in the 1890s (Not offered in 2013-2014)
HIST 219 Is Obama Black?: American Mixed Race History
HIST 226 U.S. Consumer Culture (Not offered in 2013-2014)
HIST 227 History of the American West
HIST 229 Working with Gender in U.S. History
HIST 279 American Intellectual History (Not offered in 2013-2014)
HIST 306 American Wilderness
HIST 307 Wilderness Field Studies: Grand Canyon
HIST 308 American Cities and Nature (Not offered in 2013-2014)
HIST 322 Civil Rights and Black Power (Not offered in 2013-2014)
RELG 130 Native American Religions (Not offered in 2013-2014)
RELG 140 Religion and American Culture
RELG 239 American Holy Lands
RELG 243 Native American Religious Freedom (Not offered in 2013-2014)
RELG 246 Religion and the Black Freedom Struggle (Not offered in 2013-2014)
RELG 249 Religion and American Public Life (Not offered in 2013-2014)
RELG 289 Global Religions in Minnesota
RELG 330 Radical Pacifism (Not offered in 2013-2014)

## Group III

AMST 267 Utopia, Dystopia, and Myopia: Suburbia in Fiction and Scholarship
ECON 232 American Economic History: A Cliometric Approach (Not offered in 20132014)

ECON 262 The Economics of Sports (Not offered in 2013-2014)
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 (Not offered in 2013-2014)
EDUC 238 Multicultural Education: Race, Gender and Education
EDUC 242 Developing Education Policy for Access and Equity (Not offered in 20132014)

EDUC 340 Race, Immigration and Urban Schools
EDUC 344 Teenage Wasteland: Adolescence and the American High School
EDUC 353 Schooling and Opportunity in American Society (Not offered in 2013-2014)
EDUC 365 Democracy, Diversity, and Education (Not offered in 2013-2014)
POSC 122 Politics in America: Liberty and Equality
POSC 201 National Policymaking
POSC 202 Parties, Interest Groups and Elections (Not offered in 2013-2014)
POSC 204 Media and Electoral Politics: 2010 United States Election (Not offered in 2013-2014)
POSC 205 Issues in American Democracy (Not offered in 2013-2014)
POSC 206 The American Courts (Not offered in 2013-2014)
POSC 208 The American Presidency (Not offered in 2013-2014)
POSC 212 Environmental Justice (Not offered in 2013-2014)
POSC 218 Schools, Scholarship and Policy in the United States (Not offered in 20132014)

POSC 219 Protest, Power \& Grassroots Organizing: American Social Movements (Not offered in 2013-2014)
POSC 220 Politics and Political History in Film (Not offered in 2013-2014)

POSC 231 American Foreign Policy (Not offered in 2013-2014)
POSC 271 Constitutional Law I (Not offered in 2013-2014)
POSC 272 Constitutional Law II
POSC 306 How Race Matters in American Politics* (Not offered in 2013-2014)
POSC 351 Political Theory of Martin Luther King, Jr. (Not offered in 2013-2014)
POSC 352 Political Theory of Alexis de Tocqueville*
POSC 355 Identity, Culture and Rights*
PSYC 384 Psychology of Prejudice
SOAN 115 Inequality in American Society
SOAN 150 Who Cares and Who Gets Care? Women and Health
SOAN 202 Girls Gone Bad: Women, Crime, and Criminal Justice (Not offered in 20132014)

SOAN 220 Class, Power, and Inequality in America (Not offered in 2013-2014)
SOAN 221 Law and Society (Not offered in 2013-2014)
SOAN 225 Social Movements (Not offered in 2013-2014)
SOAN 259 Comparative Issues in Native North America
SOAN 272 Race and Ethnicity in the United States
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2013-2014)
WGST 250 Women's Health Activism (Not offered in 2013-2014)

## ARABIC

See Middle Eastern Languages.

## ARCHAEOLOGY CONCENTRATION (ARCN)

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):
Any 100-level geology course (Geology 100, 110, 115, 120)
SOAN 110: Introduction to Anthropology
Core Courses (2):
GEOL 210: Geomorphology or
GEOL 258: Geology of Soils and
ARCN 246: Archaeological Methodology (Not offered in 2013-2014)

## 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 coordinator 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 coordinator for suggestions.

The concentration coordinator is 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
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 coordinator 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, Not offered in 2013-2014
247. Archaeology: Science, Ethics, Nationalism and Cultural Property This seminar course will focus on a wide range of contemporary issues in archaeology, including case studies from many continents and time periods that shed light on archaeological theory and practice. Specific course content varies. The course serves as the capstone seminar for the Archaeology Concentration; enrollment is also open to non-concentrators. 6 credits, SS; NE, Winter-M. Savina

## ART AND ART HISTORY

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 collegeâ??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 nonWestern 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. Art, Death, and the Middle Ages What happens to the body and soul when we die? What will the afterlife look like, and how should we prepare? How should we commemorate the dead? Questions like these occupied medieval Christians, and inspired tremendous artistic production ranging from personal prayer books to pilgrimage churches featuring stained glass, sculpture, and precious objects. We will consider the veneration of saints relics, burial and commemoration, and images of judgment, Hell, Purgatory, and Heaven. Our study of the visual expression of medieval Christian attitudes towards death will invite comparison to modern western attitudes and to those of other cultural and religious traditions. 6 credits, AI, WR1, IS, Fall-C. Walden
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-B.

## Jarman

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, $A L, W R$, RAD; LA, WR2, IS, Winter-R. Elfline, 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, $A L, R A D ; L A, I S$, Not offered in 2013-2014
104. 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, $A L$, RAD; LA, IDS, Not offered in 2013-2014
105. 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, $A L$, RAD; LA, IS, Not offered in 2013-2014
106. 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, $A L, R A D$; LA, IS, Not offered in 2013-2014
107. 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, $A L$; LA, IS, Spring-K. Ryor
108. History of Printmaking 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.1400-1930, 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, $A L, W R ; L A, W R 2$, Fall-A. Kettering
109. 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. 6 credits, $A L$, RAD; LA, Offered in alternate years, Not offered in 20132014
110. 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, Fall-R. Elfline
111. Medieval Art Survey of architecture, sculpture, the pictorial and decorative arts from the early Christian period to the late Gothic era. Topics include early Christian mosaics, Insular manuscripts, Romanesque monastery and pilgrimage churches, Gothic cathedrals. 6 credits, AL; LA, Winter-C. Walden
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, AL, RAD; LA, IS, Not offered in 2013-2014

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

 Centuries 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 architecutural sites within the city of Prague. 4 credits, S/CR/NC, LA, Offered in alternate years, Fall-NonCarleton faculty220. The Origins of Manga: Japanese Prints Pictures of the floating world, or ukiyoe, 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 100 level art history course. 6 credits, $A L$; LA, IS, Offered in alternate years, Winter-K. Ryor
221. 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, Not offered in 2013-2014
222. The Gothic Cathedral This course focuses on a selection of high-profile French and English churches built in the Gothic period: the Sainte-Chapelle, Reims Cathedral, and Westminster Abbey. Each commission brought together the finest artists working in a variety of media. We will examine architectural developments of the period, and related arts such as stained glass, sculpture, tombs, shrines, and illuminated manuscripts. More broadly, these works provide a lens through which to consider social, religious, and political issues, especially the cult of saints, the Crusades, and the growing powers of the French and English monarchies. Prerequisite: Any art history course. 6 credits, AL; LA, IS, Not offered in 2013-2014
223. 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 Grunewald, 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, AL, WR; LA, WR2, Not offered in 2013-2014
224. 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 2013-2014
225. 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, AL, WR; LA, WR2, Spring-A. Kettering
226. 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, AL, WR; LA, WR2, IDS, Fall-R. Elfline
227. 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, AL; LA, Not offered in 2013-2014
228. 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, Winter-R. Elfline
229. 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 off-campus 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, Not offered in 2013-2014
230. Islamic Art and the Medieval Mediterranean This course investigates the origins and development of Islamic art and architecture from the seventh to the sixteenth centuries, with a particular focus on the Mediterranean basin. Under Muslim rule, patrons and artists produced a distinctive and sophisticated visual culture in religious and secular contexts. Topics to be addressed include the expression of cultural and religious identity through visual arts; palace architecture and Islamic court culture; the development of sacred spaces; and cross-cultural exchange with the Byzantine Empire and the Christian west through trade, travel, and at specific sites such as Islamic Spain, Norman Sicily, and Crusader Palestine. Prerequisite: One art history course or permission of the instructor. 6 credits, LA, IS, Winter-C. Walden
231. English Theater and Literature in London: The Art of Tudor and Stuart Britain With a focus on the intersections of art, culture, and literature, the course explores various aspects of art in the English Renaissance, including patronage, politics and power, religion, and the role of the artist in society. Students will research specific artworks (for example, Holbein's The Ambassadors, Henry VIII's tapestries at Hampton Court Palace, The Banqueting House, St. Paul's Cathedral), visit historical sites and museums, and work with local experts as they develop their understanding and appreciation of Elizabethan and Jacobean art. 3 credits, $A L$; LA, IS, Winter-J. Shibata, P. Hecker
232. Planning Utopia: Ideal Cities in Theory and Practice This course surveys the history of ideal plans for the built urban environment. Particular attention will be given to examples from about 1800 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 Brasílian, Canberra, Chandigarh, and Washington, D.C. Prerequisite: Any one term of art history. Extra time. 6 credits, AL; LA, IS, Not offered in 2013-2014
233. Gardens in China and Japan A garden is usually defined as a piece of land that is cultivated or manipulated in some way by man for one or more purposes. Gardens often take the form of an aestheticized space that miniaturizes the natural landscape. This course will explore the historical phenomenon of garden building in China and Japan with a special emphasis on how cultural and religious attitudes towards nature contribute to the development of gardens in urban and suburban environments. In addition to studying historical source material, students will be required to apply their knowledge by building both virtual and physical recreations of gardens. 6 credits, ARP, IS, Offered in alternate years, Spring-K. Ryor
234. The Art of Death in the Middle Ages Concerns about death, the afterlife, and personal commemoration resulted in rich visual expression in the medieval period. Three main areas of inquiry will be addressed in this class: pilgrimage and the commemoration of saints (the special dead); the death and commemoration of "ordinary" individuals; and depictions of and attitudes toward the body, death, burial, Purgatory, the Last Judgment, and resurrection. Prerequisite: Any art history course. 6 credits, AL; LA, IS, Not offered in 2013-2014
235. Legacies of the Avant-Garde: Dada Then and Now By definition, the artistic neo-avantgarde of the post1945 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, $A L, W R ; L A, W R 2$, Spring-R. Elfline
236. Legacies of the Avant-Garde: Constructivism Then and Now Contemporary artists often look to the historical avant-garde movements of earlier generations for inspiration and ideological support. This course will examine how the strategies of one such historical movement, Constructivism, continue to resonate in the art world as artists question both the definition of art and its broader role in society. In particular, this course will consider how Russian artists in the 1920 s and 30 s used monochrome painting, industrial materials, installation art, public demonstrations and propaganda to alter the institution of art. We will then trace the legacies of these disruptive practices in art of the recent past. 6 credits, AL; LA, IS, Not offered in 2013-2014
237. 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 2013-2014
238. Special Projects: The Carleton Art Collection This small seminar invites students to work with the Carleton Art Collection, currently numbering about 2300 objects and recently located to the Weitz Center for Creativity. Student research and writing will be directed toward donor histories and collection strengths. In addition to guided individual projects, each student will create a brief narrative video highlighting works from the collection. These collection "tours" will be posted on the Perlman Teaching Museum website. 3 credits, ND; NE, Not offered in 2013-2014
239. 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/CR/NC, AL; LA, Spring-B. Jarman
240. Rome: The Art of Michelangelo and Caravaggio Early Modern Rome flourished as a center of art and architecture, reviving its position in classical antiquity. This course is organized around three major artists, Michelangelo, Caravaggio, and Bernini, and secondarily Annibale Carracci and Orazio and Artemisia Gentileschi in Rome, and such foreign artists as Rubens, Velazquez, and Poussin. Recurring themes will include the mechanisms of patronage, concepts of the naturalistic, artistic self-definition, church renewal, the urban landscape, and the interdependence of architecture and society. The major question throughout the term: What difference does it make that this art was produced in Rome? Prerequisite: Any course in art history at Carleton. 6 credits, AL, WR; LA, WR2, IS, Not offered in 2013-2014
241. 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, Not offered in 2013-2014
242. Arts of the Chinese Scholar's Studio During the sixteenth and seventeenth centuries in China, unprecedented economic development and urbanization expanded the number of educated elite who used their wealth to both display their status and distinguish themselves as cultural leaders. As a result, this period experienced a boom in estate and garden building, art collecting and luxury consumption. This course will examine a wide range of objects from painting and calligraphy to furniture and ceramics within the context of domestic architecture of the late Ming dynasty. It will also examine the role of taste and social class in determining the style of art and architecture. Prerequisite: Any one term of art history. 6 credits, AL; LA, IS, Not offered in 2013-2014
243. Visual Culture and the Civil War How did images reflect and shape popular attitudes towards the events
and issues of the American Civil War? This seminar will investigate various visual media, ranging from printed ephemera to fine art, seeking answers to this question. The course will analyze reportage and artworks portraying specific events, such as the Battle of Gettysburg and the assassination of President Lincoln, as well as examine pictorial treatments of subjects such as slavery and emancipation, secession and union, military camp life and the home front. Later thematic directions for the course will be influenced by individual student research projects. Prerequisite: Any 200-level art history course or by permission of the instructor. 6 credits, WR; LA, WR2, IDS, Winter-B. Jarman
244. 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 re-thinking 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, post-feminism, simulation, post-colonialism and globalization. Prerequisite: Any two art history courses. 6 credits, $A L$; LA, Offered in alternate years, Not offered in 2013-2014
245. 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, $A L$; LA, IS, Not offered in 2013-2014
246. 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/NC, ND; NE, Fall, Winter, Spring-Staff

## 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, $A L$; ARP, Fall, Winter, Spring-D. Bruggeman, F. Hagstrom, D. Lefkowitz
111. Field Drawing A beginning drawing course for students 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, D. Lefkowitz
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, $A L$; ARP, 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. 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, $A L$; ARP, Not offered in 20132014
114. Experimental Photography In this course we will explore the rich history of photography's experimental
development through the use of light and chemistry. Our focus will be on black and white darkroom experimentation and color scanning and digital printing. Demonstrations will cover a wide range of materials and techniques such as; the making of pin hole cameras, paper negatives, photograms, photomontages, and the use of toning, solarization and liquid emulsion on paper and glass. Students will create a portfolio and recipe book of their experimental investigations. 6 credits, $A L$; ARP, Fall, Winter-L. Rossi
115. Life Drawing Understanding the basic techniques of drawing the human form is fundamental to an art education and is the emphasis of this class. Humans have been engaged in the act of self-representation since the beginning of time. The relationship artists have had with drawing the human body is complex and has been the subject of religious, philosophical and personal investigation for centuries. Concentrating on representational drawing techniques we will explore a variety of media and materials. Supplemented by lectures, readings and critiques, students will develop an understanding of both contemporary and historical approaches to drawing the human figure. Prerequisite: Studio Art 110 or 113. 6 credits, AL; ARP, Winter—D. Bruggeman
116. Studio Art Seminar in the South Pacific: Mixed-Media Drawing This course involves directed drawing in bound sketchbooks, using a variety of drawing media, and requires on-going, self-directed drawing in visual journals. Subjects will include landscape, figure, portraits, and nature study. The course will require some hiking in rugged areas. Prerequisite: Studio Art 110 or 113. 6 credits, $A L$; ARP, Offered in alternate years, Not offered in 2013-2014
117. 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, AL; ARP, Fall-K. Connole
118. 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
119. The Figure in Clay This course is an introduction to the figurative and narrative potential of clay as a sculptural medium. Through hands-on demonstrations, lectures, readings, and assignments students will develop an understanding of both contemporary and historical approaches to forming the human figure in clay. The relationship artists have with the human body is complex and has been the subject of religious, philosophical and personal investigation for centuries. This course will analyze this relationship while developing technical skills in construction and firing techniques specific to ceramics. Prerequisite: ARTS 110, 113, or 122. 6 credits, AL; ARP, Not offered in 2013-2014
120. 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, Spring-L. Rossi
121. 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, Not offered in 2013-2014
122. 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, Fall, Winter-D. Saathoff
123. Metalsmithing: Casting and Color This course focuses on casting, enameling, and stone setting as methods of creating jewelry and small sculptural objects in copper and silver. Specific instruction will be given in developing the skills of forming, joining, and surface enrichment to achieve complex metal pieces. Previous experience with metalsmithing is not required but may be helpful. Prerequisite: Studio Art 110, 113 or 122. 6 credits, ARP, Spring-D. Saathoff
124. 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, AL; ARP, Winter, Spring-D. Lefkowitz
125. 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 2013-2014
126. English Theater and Literature in London: Visualizing the Renaissance What did the English Renaissance look like? Through on-site observational drawing, watercolor and gouache painting, and/or digital photography, students will investigate the paintings, ceramics, woodwork, metalwork, textiles, fashion, heraldry, architecture, and landscape gardening of early modern England. The critical observation and artistic rendering of these objects and spaces will afford students a window into the culture of the English Renaissance as they acquaint themselves with the visual vocabulary of the past. 3 credits, AL; ARP, IS, Winter-J. Shibata
127. 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, Offered in alternate years, Winter-F. Hagstrom
128. Studio Art Seminar in the South Pacific: Printmaking This course provides instruction in the techniques of intaglio and relief printmaking. Students will work in printmaking media on directed projects, exploring the story-like nature of visual art. Participation in critiques and group assignments as well as individually directed work will be required. Prerequisite: Studio Art 110 or 113. 6 credits, AL; ARP, Offered in alternate years, Not offered in 2013-2014

## 275. Studio Art Seminar in the South Pacific: Physical \& Cultural Environment of Australia \& New

 Zealand This course examines how Australia and New Zealand have changed since colonization. Students study the physical and environmental beginnings of these countries and learn about the history of their indigenous people, noting how the physical landscape has been changed through agriculture, mining, and the importation of non-native species. This course will include readings, meetings with visiting artists and lecturers, and visits to cultural centers. 6 credits, S/CR/NC, SS; LA, IS, Not offered in 2013-2014277. 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 2013-2014
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 single- and 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 2013-2014
279. Bookbinding This class will introduce the fundamentals of hand bookbinding with special emphasis on making journals and albums. We will learn several different binding methods using historical and non-traditional techniques and a variety of different materials, tools and adhesives. In addition we will cover basic box making. Boxes, like books, serve many purposes, one being to house and protect valuable and fragile objects. We will
make slipcases and clamshell boxes to protect books and prints. Prerequisite: Studio Art 110 or 113.6 credits, ARP, Fall-J. Pullman
280. 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/CR/NC, AL; ARP, Spring-L. Rossi
281. 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, Not offered in 2013-2014
282. 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 six week design/build challenge. Prerequisite: Studio Art 122 or by permission of the instructor. 6 credits, AL; ARP, Spring-S. Mohring
283. 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
284. 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 or 240 or Arts 141 or by permission of the instructor. 6 credits, ARP, Winter-L. Rossi
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, Not offered in 2013-2014
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, $A L ; A R P$, Fall-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/NC, ND, Fall, Winter, Spring-Staff

## ASIAN LANGUAGES AND LITERATURES

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
112. 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 2013-2014
113. 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 Indo-European 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 2013-2014

## 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, Staff
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, $S / C R / N C, A L$, RAD; LA, Spring-Q. Zhao

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-F. Merritt
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, ND; NE, Spring-F. Merritt
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, Not offered in 2013-2014
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/CR/NC, AL; LA, Not offered in 2013-2014
248. The Structure of Chinese This course uses linguistic methodology to examine the structure of Modern Standard Chinese. Its purpose is 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 2013-2014
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, Not offered in 2013-2014
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, Not offered in 2013-2014
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/CR/NC, ND; NE, Fall—M. Hansell
346. Advanced Readings: Chinese Fiction Readings from well-known writers such as Ba jin, Lao She, Lu Xun, Cao Xueqin and contemporary authors. The course will expose students to excerpts from modern Chinese novels and short stories. Emphasis on reading, writing, and speaking. Some practice in discussion, translation, review, literary criticism and dramatization. Some readings of classical fiction and other genres like esays and poerty will be included. Prerequisite: Chinese 206 or the equivalent. 6 credits, LA, IS, Spring-Q. Zhao
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 2013-2014
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, AL; NE, Not offered in 2013-2014
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 2013-2014
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 2013-2014
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 2013-2014
363. Conversation and Composition: the Liberal Arts in Chinese Carleton students receive a broad education, their ability to express themselves in Chinese should be equally broad. This course will provide instruction and practice in speaking, reading, and writing about fundamental concepts from natural sciences, social sciences, humanities, and the arts. Students will learn to read and discuss the kind of non-specialist works that any well-educated speaker can comprehend, and will also receive a foundation that can lead to more specialized work. Specific topics to be covered will depend on the interests of students in the class. Prerequisite: Chinese 206 or equivalent. 6 credits, NE, Winter-M. Hansell

## 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, N. Tomanari
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-E. TiltonCantrell, 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 2013-2014
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, $A L$, RAD; LA, Winter-N. Tomonari
235. Contemporary Japanese Women in Translation: Bad Girls Close readings of novels, short stories, and poetry by prominent modern and contemporary Japanese women such as Enchi Fumiko, Kono Taeko, Yamada Eimi, and Ito Hiromi, looking at how women suffer, challenge, violate, and change social norms and standards. Course conducted in English. 6 credits, AL; LA, IS, Not offered in 2013-2014
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, Not offered in 2013-2014
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, $A L, R A D$; LA, IS, Not offered in 2013-2014
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, $A L$; LA, Not offered in 2013-2014
343. Advanced Japanese Through Fiction and Film In this course we will subtitle in English language a recent Japanese film and also read the novel on which the film is based. The aims of this course are to understand Japanese spoken at a natural speed, to improve the reading skills of Japanese texts, and to comprehend some aspects of contemporary Japan. The students are expected to participate actively in the discussion of film/novel and of subtitles. Prerequisite: Japanese 206 or the equivalent. 6 credits, $A L$; LA, IS, Not offered in 2013-2014
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 2013-2014
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, AL; LA, Not offered in 2013-2014
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 2013-2014
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, $A L$; LA, Not offered in 2013-2014
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, $A L$; LA, Not offered in 2013-2014
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, $A L ; L A$, Not offered in 2013-2014
353. Thinking about Environmental Issues in Japanese This course explores various environmental issues, pollution, recycle, etc., in Japanese using newspaper clips, internet, and other authentic written texts. We will examine what kind of environmental issues Japan faces and how the government and communities are dealing with them. Then students are expected to explore how their communities are dealing with environmental issues. The purpose of the course is to encourage students to think about issues, contents, in Japanese rather than study purely language, grammar and vocabularies. Students are expected to write a short research paper in Japanese and do class presentation at the end. Prerequisite: Japanese 206 or above. 6 credits, NE, Offered in alternate years, Spring-M. Kaga

## ASIAN STUDIES (ASST)

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-based. Students who do major in disciplinary-based 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 Seminar (Not offered in 2013-2014)
HIST 298 Junior-year History Colloquium
LCST 245 Introduction to Critical Methods: Structure, Gender, Culture
POSC 230 Methods of Political Research
RELG 300 Theories and Methods 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: Literary/Artistic Analysis, Humanistic Inquiry, and Social Inquiry
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 2013-2014)
ARTH 165 Japanese Art and Culture (Not offered in 2013-2014)

ARTH 166 Chinese Art and Culture
ARTH 209 Chinese Painting (Not offered in 2013-2014)
ARTH 220 The Origins of Manga: Japanese Prints
ARTH 267 Gardens in China and Japan
ARTH 320 Japanese Theater: Visualizing Narrative Across Media (Not offered in 20132014)

ARTH 321 Arts of the Chinese Scholar's Studio (Not offered in 2013-2014)
ASLN 111 Writing Systems
ASLN 237 Tao of Wisdom in Asian Literature (Not offered in 2013-2014)
ASLN 260 Historical Linguistics (Not offered in 2013-2014)
ASST 284 Linguistics Seminar: History and Culture of Japan
CHIN 115 The Taoist Way of Health and Longevity: Taichi and Other Forms
CHIN 206 Chinese in Cultural Context
CHIN 207 Chinese Studies Seminar in Tianjin: Chinese Language (Not offered in 20132014)

CHIN 212 Chinese Studies Seminar in Tianjin: Chinese Culture (Not offered in 20132014)

CHIN 248 The Structure of Chinese (Not offered in 2013-2014)
CHIN 282 Chinese Studies Seminar in Tianjin: Chinese Civilization (Not offered in 20132014)

CHIN 307 Chinese Studies Seminar in Tianjin: Advanced Chinese Language (Not offered in 2013-2014)
CHIN 346 Advanced Readings: Chinese Fiction
CHIN 347 Advanced Readings in Contemporary Chinese Prose: Newspapers (Not offered in 2013-2014)
CHIN 348 Advanced Chinese: The Mass Media (Not offered in 2013-2014)
CHIN 349 Advanced Chinese: Social Commentary (Not offered in 2013-2014)
CHIN 350 Advanced Chinese: Poems and Stories (Not offered in 2013-2014)
CHIN 360 Classical Chinese (Not offered in 2013-2014)
ECON 240 Microeconomics of Development
ECON 241 Growth and Development (Not offered in 2013-2014)
HIST 152 History of Early China (Not offered in 2013-2014)
HIST 153 History of Modern China (Not offered in 2013-2014)
HIST 156 History of Modern Korea
HIST 254 Colonialism in East Asia (Not offered in 2013-2014)
HIST 255 Print Culture and Nationalism in East Asia (Not offered in 2013-2014)
HIST 256 History of Urban China
HIST 257 Urban History in Beiijing and Beyond Program: History of Urban China and Korea
HIST 295 Urban History in Beijing and Beyond Program: Individual Research: Mapping Chinese and Korean Cities
JAPN 204, 205, 206 Intermediate Japanese
JAPN 230 Topics in Pre-Modern Literature in Translation (Not offered in 2013-2014)
JAPN 231 Japanese Cinema in Translation
JAPN 236 Classical Japanese Fiction: The Tale of Genji and Its World in Translation (Not offered in 2013-2014)
JAPN 240 Literature and Society of Modern Japan in Translation (Not offered in 20132014)

JAPN 343 Advanced Japanese Through Fiction and Film (Not offered in 2013-2014)
JAPN 344 Advanced Writing: Contemporary Prose (Not offered in 2013-2014)
JAPN 345 Advanced Reading in Modern Japanese Literature: The Short Story (Not offered in 2013-2014)
JAPN 348 Advanced Japanese Conversation and Composition (Not offered in 20132014)

MUSC 182J Chinese Musical Instruments (Juried)
POSC 170 International Relations and World Politics
POSC 237 Southeast Asian Politics
POSC 239 The Diplomat's Craft: Three Case Studies
POSC 241 Ethnic Conflict
RELG 140 Religion and American Culture
RELG 151 Religions in Chinese Culture (Not offered in 2013-2014)
RELG 152 Religions in Japanese Culture
RELG 153 Introduction to Buddhism
RELG 253 Tibetan Buddhism (Not offered in 2013-2014)
RELG 254 Zen Buddhism (Not offered in 2013-2014)
RELG 255 Social Engagement in Asian Religions
RELG 268 Encountering Islam: Dialogue and Difference (Not offered in 2013-2014)
RELG 350 Emptiness (Not offered in 2013-2014)
WGST 310 Asian Mystiques Demystified (Not offered in 2013-2014)

## SOUTH ASIA:

ARTH 164 Buddhist Art (Not offered in 2013-2014)
ARTH 165 Japanese Art and Culture (Not offered in 2013-2014)
ECON 240 Microeconomics of Development
ECON 241 Growth and Development (Not offered in 2013-2014)
ENGL 245 Bollywood Nation
ENGL 250 Modern Indian Fiction (Not offered in 2013-2014)
ENGL 251 Contemporary Indian Fiction (Not offered in 2013-2014)
ENGL 252 Caribbean Fiction
HIST 161 History of Modern India, c. 1700-1047
HIST 167 History of Modern South Asia 1947-Onward
HIST 259 Women in South Asia: Histories, Narratives and Representation
HIST 266 History of Islam in India (Not offered in 2013-2014)
MUSC 180J Raga: Vocal or Instrumental Study of Hindustani Music
MUSC 248 Music of India
POSC 170 International Relations and World Politics
POSC 241 Ethnic Conflict
POSC 247 Identity and Belonging in the New Europe: Comparative Nationalism
RELG 122 Introduction to Islam
RELG 123 The Qur'an (Not offered in 2013-2014)
RELG 150 Religions of South Asia
RELG 153 Introduction to Buddhism
RELG 155 Religions of Southeast Asia (Not offered in 2013-2014)
RELG 163 Qur'an
RELG 251 Theravada Buddhism (Not offered in 2013-2014)
RELG 252 Mahabharata: The Hindu Book of War and Peace (Not offered in 2013-2014)
RELG 253 Tibetan Buddhism (Not offered in 2013-2014)

RELG 255 Social Engagement in Asian Religions
RELG 259 Gandhi (Not offered in 2013-2014)
RELG 350 Emptiness (Not offered in 2013-2014)
SOAN 157 Culture and Politics in India (Not offered in 2013-2014)
SOAN 257 Culture and Politics in India (Not offered in 2013-2014)
WGST 310 Asian Mystiques Demystified (Not offered in 2013-2014)

## CENTRAL ASIA:

ECON 240 Microeconomics of Development
ECON 241 Growth and Development (Not offered in 2013-2014)
HIST 254 Colonialism in East Asia (Not offered in 2013-2014)
HIST 265 Central Asia in the Modern Age
HIST 360 Muslims and Modernity (Not offered in 2013-2014)
RELG 122 Introduction to Islam
RELG 153 Introduction to Buddhism
RELG 253 Tibetan Buddhism (Not offered in 2013-2014)
RELG 255 Social Engagement in Asian Religions
SOAN 256 Ethnography of Africa (Not offered in 2013-2014)
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 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 207 Chinese Studies Seminar in Tianjin: Intermediate Chinese Language
JAPN 101, 102, 103 Elementary Japanese
JAPN 204, 205 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 College has several of its own term-long off-campus studies programs. 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 are also available. The Urban History in Beijing and Beyond takes students to several cities with a colonial past in northeast China, as well as Seoul, Korea. The Linguistics Off-Campus Seminar in Kyoto offers courses in Japanese history and culture in addition to linguistics.

Carleton also 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. 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. Opportunities to study in Asia also are available through a variety of non-Carleton programs and non-consortial 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.

## Asian Studies Courses (ASST)

100. Globalization in India Images of "globalization" in India populate the mass media--buzzing international call-centers, waves of job out-sourcing, hybrid cultural and musical forms, and burgeoning eco-tourism. This course will examine the various theories and case studies of globalization, as an economic, cultural, and political process. We will explore views which celebrate globalization as well as views which point out the negative effects of globalization on communities and livelihoods. We will look at responses to globalization from across the political spectrum. These perspectives will include farmers challenging corporate agricultural policies, environmentalism, struggles for localized control over resources, religious fundamentalism, and transnational feminism. 6 credits, AI, WR1, IS, Fall-B. LaRocque
101. Linguistics Seminar: History and Culture of Japan This course is an introduction to several aspects of Japanese society, taking advantage of the Linguistics Off-Campus Studies Seminar seminar in Kyoto. The course consists of readings and lectures about important events in historical and contemporary Japan, and will include visits to sites that illuminate those events in an important way. In addition to Kyoto and the nearby Uji and Nara, we will also make excursions to Tokyo, Kobe, and Hiroshima. 6 credits, HU, RAD; HI, IS, Offered in alternate years, Spring-Doshisha University Faculty
102. Integrative Exercise 6 credits, S/NC, ND, Fall, Winter, Spring—Staff

## ASTRONOMY

See Physics and Astronomy

## BIOCHEMISTRY CONCENTRATION

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 studentâ??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

Students must take one introductory chemistry course chosen from Chemistry 123 Principles of Chemistry or Chemistry 128, Principles of Environmental Chemistry; one biology course chosen from either version of Biology 125 Genes, Evolution, and Development. Students must take all of the following courses: Biology 126, Energy Flow in Biological Systems, Biology 380, Biochemistry, Chemistry 230, Equilibrium and Analysis, Chemistry 233, Organic Chemistry I and Chemistry 234 Organic Chemistry II. Students must take one laboratory course from Biology 381 Biochemistry Laboratory or Chemistry 321, Biological Chemistry Laboratory.

## Upper Level Course Electives

(one course is required)
BIOL 310 Immunology
BIOL 367 The Molecular Basis of Human Disease
BIOL 372 Seminar: Selected Topics in Exercise Biochemistry (Not offered in 2013-2014)
BIOL 382 Molecular Biology (Not offered in 2013-2014)
BIOL 385 Microbial Pathology
CHEM 324 Chemistry and Biology of Antibiotics (Not offered in 2013-2014)
CHEM 343 Chemical Thermodynamics
CHEM 350 Chemical and Biosynthesis
CHEM 360 Chemical Biology (Not offered in 2013-2014)

## 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 Biology 240.

BIOL 230 Introduction to Pharmacology
BIOL 234 Microbiology with laboratory
BIOL 240 Genetics
BIOL 280 Cell Biology
PSYC 318 Psychopharmacology

## BIOLOGY (BIOL)

Potential biology majors should select a sequence of courses that will acquaint them with a variety of organisms, and their molecular and cellular structure, physiology, heredity, development, evolution, and ecological interactions. Biologists pursue careers in biological research, study in the medical sciences, teaching at the college or high school level, work in
environmental sciences, or work in numerous commercial and industrial areas.

## Requirements for a Major

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 (230, 240/241, 278, 280/281, 310/311, 380/381, 382/383)
b. Organismic Biology (Biology 232/233, 234, 236, 238/239, 242/243, 252/253, 309, 342/343, 344, 386/387)
c. Ecology and Evolutionary Biology (Biology 221/222, 238/239, 248, 250, 308, 350, 352/353, 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. Ideally, you should complete this course prior to registering for Biology 400 (integrative exercise). Courses that fulfill this requirement include: 344, 358, 364, 365-379, 382/383, 385, 389.
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 unless otherwise noted. 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, or 165 ( 6 credits); 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, both of which are required before any further upper-level course work in Biology. The two courses can be taken in either order. Students who received a score of 5 on the AP exam or a score of 6 or 7 on the IB exam are exempted from Biology 125, and only need to take Biology 126 before taking upper-level Biology courses.

There are two versions of Biology 125, and students are urged to make a thoughtful choice of the appropriate offering based on their background and learning style. The winter term offering of Biology 125 is designed for students who 1) earned a score of 3 or 4 in AP Biology, or 2) received a score of 5 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, Spring-M. Rand
102. 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, Winter-M. McKone, S. Zweifel
103. Genes, Evolution, and Development: A Problem Solving Approach This offering of Biology 125 offers a problem solving approach and covers the same concepts as the winter version 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-J. Wolff, J. Petricka
104. 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-D. Hernandez, R. Mitra, M. Rand, J. Tymoczko
105. 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, Spring-D. Hernandez
106. 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 2013-2014
107. 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. Concurrent registration in Biology 222 is required. Prerequisite: Biology 126 and one of the following: Biology 125, Geology 110, Chemistry 123 or 128. 6 credits, MS; NE, QRE, FallD. 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. 6 credits, MS; NE, QRE, Not offered in 2013-2014
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 principal 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. Concurrent registration in Biology 233 required. Prerequisite: Biology 125 and 126. 6 credits, MS; NE, QRE, Winter-A. Moore
232. Human Physiology Laboratory Prerequisite: Concurrent registration in Biology 232 required. 2 credits, NE, Winter-A. Moore
233. 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, MS; LS, QRE, Offered in alternate years, Not offered in 2013-2014
234. Plant Biology How do plants work? 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. Emphasis is placed on experimental approaches to the study of plants. The biology behind current issues related to food and agriculture, including genetically modified organisms, will be investigated. Prerequisite: Biology 125 or 126. 6 credits, MS; NE, QRE, Spring-J. Petricka
235. 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, Not offered in 2013-2014
236. 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, Not offered in 2013-2014
237. 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-J. Petricka, S. Zweifel

## 241. Genetics Laboratory 2 credits, ND; NE, Winter, Spring-J. Petricka, S. Zweifel

242. 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, MS; NE, Not offered in 2013-2014

## 243. Vertebrate Morphology Laboratory 2 credits, ND; NE, Not offered in 2013-2014

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. 6 credits, MS; NE, QRE, Winter-A.

## Bosacker

250. 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, MS; NE, QRE, Not offered in 2013-2014
251. 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. Prerequisite: Biology 125 and 126. 6 credits, MS; NE, QRE, FallM. Rand

## 253. Environmental Animal Physiology Laboratory 2 credits, ND, 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, $S / C R / N C, N D ; N E, N o t$ offered in 2013-2014
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 methodologies used to study cells; organelles, membranes and other cellular components; protein targeting within the cell; and cellular communication and division. Concurrent registration in Biology 281 required. Prerequisite: Biology 125 and 126. 6 credits, 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, ND; NE, Fall-R. Mitra
260. 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. Prerequisite: Permission of instructor. 6 credits, SI, Offered in alternate years, Not offered in 2013-2014
261. Biology in Australia and New Zealand: Evolutionary Ecology of Australia and New Zealand The evolutionary histories of Australia and New Zealand are unique because of their relative isolation from other continental land masses. This course will explore the biogeography of these areas, with emphasis on the evolutionary diversification of endemic lineages of organisms including mammals (such as marsupials), birds (such as moas), plants, and insects. Class research projects on site will examine how ecological interactions have evolved among these unique species, and how these interactions are being affected by the large number of introduced species now present. Prerequisite: Biology 125 and 126; one additional course in ecology, evolution, or physiology. 6 credits, MS; NE, QRE, Offered in alternate years, Winter-M. McKone
262. Biology in Australia and New Zealand: Ecology and Conservation in Ecology and New Zealand Australia and New Zealand have a diversity of ecosystem types and ecological communities, from eucalypt and beech forests, to desert shrublands and alpine grasslands. This course will explore the ecological processes that shape these landscapes, including climate variability, plant-animal interactions, and disturbance, as well as the conservation challenges resulting from land use change, invasive species, and climate change. Students will design and conduct research projects and present their findings in written and oral reports. Prerequisite: Biology 125 and 126, and one additional course in ecology, evolution, or physiology. 6 credits, MS; NE, QRE, Offered in alternate years, Winter-D. Hernandez

## 309. Biology in Australia and New Zealand: Comparative Reproduction of Australian Vertebrates

Australia has a remarkable diversity of terrestrial vertebrates, including many marsupials, lizards, and snakes. These animals span a wide array of reproductive strategies, and we will consider the evolutionary pressures that produce differences in reproductive morphology, physiology, and behavioral ecology of a variety of Australian vertebrates. Why do some species give birth while others lay eggs? What environmental conditions favor territoriality? How do environmental cues initiate the reproductive season? A thorough understanding of the ultimate and proximate mechanisms that shape the vast diversity of vertebrate reproductive traits requires an interdisciplinary approach, which we will pursue in field research projects. Prerequisite: Biology 125 and 126, or equivalent, and at least one additional 200 -level or 300 -level course in ecology, evolution, physiology, or morphology. 6 credits, MS; NE, QRE, Offered in alternate years, Winter-M. Rand
310. 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, ND; NE, Not offered in 2013-2014

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, MS; NE, QRE, Spring-J. Wolff
343. Animal Developmental Biology Laboratory Laboratory will introduce descriptive and experimental embryological techniques using a variety of model organisms. 2 credits, ND; NE, Spring-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 2013-2014
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/CR/NC, ND; NE, Spring-C. Crutchfield
355. Evolution of Sex and Sexes The origin and maintenance of sexual reproduction remains a central enigma in evolutionary biology. This seminar course will explore contemporary primary literature that addresses a variety of evolutionary questions about the nature of sex and sexes. Why is sexual reproduction usually favored over asexual alternatives? Why are there no more than two sexes? What determines the characteristics of females and males within diverse species? How did sex chromosomes evolve and why do some species lack them? Prerequisite: Biology 125 and 126. 6 credits, MS; NE, QRE, Offered in alternate years, Not offered in 2013-2014
356. 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 literture 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. Prerequisite: Biology 125 and 126. 6 credits, MS, Fall-A. Moore
357. The Molecular Basis of Human Disease The course will examine the biochemical basis of human disease. 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 primary literature, will be used and the emphases will be placed on critical evaluation of experimental design and data interpretation. Prerequisite: Biology 232 or 240 or 242 or 278 or 380 or Chemistry 320 or consent of instructor. 6 credits, MS; NE, QRE, Offered in alternate years, Winter-J. Tymoczko
358. 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, Winter-J. Wolff
359. Developmental Neurobiology Laboratory 2 credits, ND; NE, Not offered in 2013-2014
360. 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 HIV-treatment 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, Spring-D. Walser-Kuntz
361. Seminar on Human Dominated Ecosystems Human dominated ecosystems occur wherever human activities become the prevailing force in ecological patterns and processes, including everything from a clear-cut tropical forest to your backyard. It also includes remote areas changing because of human alteration of nutrient cycles and the climate. As human population and impacts grow, so does the need to understand how ecosystems respond. This course will use recent scientific literature to explore this new field of ecology, the study of human dominated ecosystems. Topics include the ecology of cities, decimated ecosystems, ecology of the post-war landscape, preservation and restoration under a changing climate, and designed ecosystem. Prerequisite: Biology 125, 126 and one upper-level ecology course (Biology 210, 221, 236, or 352) or permission from the instructor. 6 credits, MS; NE, QRE, Not offered in 2013-2014
362. 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 232, 278, 280, 380 or Chemistry 320 or consent of the instructor. 6 credits, MS; NE, QRE, Not offered in 2013-2014
363. 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, Not offered in 2013-2014
364. Natural History of Minnesota This course will explore the ecology of the ecosystems and organisms of Minnesota-- including lakes and rivers, grasslands, and deciduous and boreal forest--through the reading and analysis of the primary literature and independent field research projects. Students will gain skills in species identification, experimental design, scientific writing and presentation. In addition to scheduled class time, this course includes two weekend field trips. Prerequisite: Biology 125, Biology 126, and one upper-level course in ecology (Biology 221, 236, 238, or 352). 6 credits, MS; NE, QRE, Offered in alternate years, Not offered in 2013-2014
365. 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, $M S$; $N E$, QRE, Fall-M. Rand, S. Zweifel
366. 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
367. Biochemistry Laboratory 2 credits, ND; NE, Fall—Staff
368. 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 expression, 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 2013-2014

## 383. Molecular Biology Laboratory 2 credits, ND; NE, Not offered in 2013-2014

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. Prerequisite: Biology 125 and 126 and either Biology 280 or 240. 6 credits, MS; 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; neurons and muscle, transfer of information across synapses, mechanisms of sensation, learning, memory, and behavior. Prerequisites: Biology 125 and 126. 6 credits, MS; NE, QRE, Spring-A. Moore

## 387. Neurobiology Laboratory 2 credits, ND, Spring-A. Moore

389. Evo-Devo: Evolutionary Developmental Biology This seminar course is focused on introductory concepts in evolutionary developmental biology. We will use critical evaluation of primary literature to explore how the genetic mechanisms that control development have evolved the diversity of life on earth. Prerequisite: One of the following: Biology 240, 242, 280, 342, 350, or permission of instructor. 6 credits, MS; NE, QRE, Not offered in 2013-2014
390. 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
391. 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.
392. 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, Fall, Winter-Staff
393. 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). 3 credits, S/NC, ND; NE, Fall, Winter, Spring-Staff

## CHEMISTRY (CHEM)

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 selfadministered 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, $328,339,348,350,351,353,354,358,359,360,361,362$; and one of the following lab courses: 306, 321, 329, 335, 338, 339, 349, 352, 355; Physics: One Newtonian mechanics
course, Physics 131, 132, 141, or 142, and one of the following physics courses: 151, 152, 153, or 165; 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 165 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

113. 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, Spring-S. Drew
114. 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; NE, QRE, Fall—D. Kohen
115. 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, Fall, Winter-C. Calderone, D. Kohen, M. Whited
116. 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, Spring-W. Hollingsworth
117. 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, D. Gross
118. Organic Chemistry I Theoretical aspects of carbon chemistry are examined with reference to structurereactivity relationships, functional groups, stereochemistry, reaction mechanisms and spectroscopy. Laboratory work concentrates on modern techniques of organic chemistry, inquiry-based projects, and spectroscopic analysis. One laboratory per week. Prerequisite: Chemistry 123 or 128.6 credits, MS; LS, QRE, Fall, Winter-D.

## Alberg, G. Hofmeister

234. 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-J. Chihade
235. 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; NE, WR2, QRE, Fall-D. Gross, T. Ferrett
236. 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-T. Ferrett, W. Hollingsworth
237. 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 tenweek term. Prerequisites: Chemistry 234 and 344 or consent of instructor. 2 credits, ND; NE, QRE, Winter-G. Hofmeister
238. 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, MS; NE, QRE, Spring-C. Calderone
239. 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-C. Calderone
240. Chemistry and Biology of Antibiotics This course will survey the mechanisms of antibiotic activity from a biochemical perspective, covering the major classes of antibiotics along with their respective biological targets using a combination of lecture and discussion of recent literature. We will also explore strategies for antibiotic discovery including combinatorial and rational approaches, as well as the molecular origins of the current crisis in antibiotic resistance. Prerequisite: Chemistry 234. 6 credits, MS; NE, QRE, Not offered in 2013-2014
241. 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, Not offered in 2013-2014
242. Environmental Analysis Laboratory Credit for the laboratory portion of Chemistry 328. Co-requisite: Chemistry 328. 2 credits, ND; NE, QRE, Not offered in 2013-2014
243. 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; LS, QRE, Winter
244. A Survey of Instrumentation for Chemical Analysis This laboratory course provides students with additional experience using instrumental methods for quantitative chemical analysis. Laboratory work will consist of five assigned experiments that use instrumental techniques such as liquid and gas chromatography, UV spectrophotometry and fluorometry, mass spectrometry, and voltammetry. In addition, these analytical
techniques will be studied on a more theoretical level in order to better understand their function. This laboratory course will conclude with an instrumental analysis project that will be researched and designed by each student. Prerequisite: Chemistry 230. 2 credits, NE, QRE, Not offered in 2013-2014—S. Drew
245. 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, 162 or 165.6 credits, MS; NE, QRE, Fall-D. Kohen
246. 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, 162 or 165. 6 credits, MS; NE, QRE, Winter-W. Hollingsworth
247. 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, $S / C R / N C, M S$; $N E$, QRE, Not offered in 2013-2014
248. 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, Spring-D. Kohen
249. Computational Chemistry Laboratory Credit for the laboratory portion of Chemistry 348. Corequisite: Chemistry 348. 2 credits, ND; NE, Spring-D. Kohen
250. 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, Spring—D. Alberg
251. 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. Whited
252. Laboratory in Advanced Inorganic Chemistry Synthesis, purification and spectroscopic characterization of transition-metal complexes with an emphasis on methods for preparing and handling air-sensitive compounds. One laboratory per week. Corequisite: Chemistry 351. 2 credits, NE, QRE, Spring-G. Hofmeister, M. Whited
253. 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. Prerequisite: Chemistry 234. Corequisite: Chemistry 301 or 343 or 344. 6 credits, MS; NE, QRE, Offered in alternate years, Not offered in 2013-2014
254. 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, Not offered in 2013-2014
255. 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 excitedstate phenomena using techniques such as laser-induced fluorescence and Raman scattering. Corequisite: Chemistry 354. 2 credits, ND; LS, QRE, Not offered in 2013-2014
256. Organometallic Chemistry This course covers the bonding and reactivity of organometallic complexes in the context of their applications to industrial catalysis, the synthesis of complex organic molecules, and energy science. We will use simple yet powerful tools such as the eighteen-electron rule and isoelectronic arguments to rationalize and predict observed reactivity, and current literature will be extensively utilized. Prerequisite: Chemistry 234. 6 credits, MS; NE, Offered in alternate years, Winter-M. Whited
257. 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 and proceed to larger molecules culminating in dimers and asymmetric molecules using the Hoffmann Fragment Approach. Prerequisites: Chemistry 351 or consent of the instructor. 6 credits, MS; NE, QRE, Not offered in 2013-2014
258. 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 2013-2014
259. 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, Not offered in 2013-2014
260. Chemistry at the Nanoscale This seminar involves critical examination and discussion of the research literature of prominent investigators in the young interdisciplinary field of nanochemistry. Learning will draw from multiple disciplines in chemistry (physical, analytical, inorganic, and organic), physics, biology--and on the science of complex and self-assembled systems. Includes a focus on how to synthesize, characterize, and apply the unique properties of nanomaterials to novel and emerging applications in medicine, renewable energy, and technology. Discussion-based and team learning will be used. Prerequisite: One of the following: Chemistry 320, 343, 344, or 360. Any of these can be co-requisites. 6 credits, NE, Fall-T. Ferrett
261. 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, Fall, Winter, SpringStaff
262. 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 "Cl" 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/NC, ND, Winter, Spring-Staff

## CHINESE

## See Asian Languages and Literature.

## CINEMA AND MEDIA STUDIES (CAMS)

The Cinema and Media Studies (CAMS) major combines the critical study of film and media with digital media production, reflecting a liberal arts philosophy in which critical thinking and creative making are mutually informing. Curricular emphasis is on cinema studies (film history, theory and production) with some reaching out towards visual studies (digital photography, projection installations and graphic design) and sound studies (audio history, theory and production).

## Requirements for a Major

Seventy-two credits are required for the major; forty-eight credits in core courses and twenty-four 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 265 Sound Design (Not offered in 2013-2014)
CAMS 270 Nonfiction I
CAMS 271 Fiction
CAMS 275 Audio Workshop (Not offered in 2013-2014)
CAMS 276 Fiction II: Producing and Directing the Short Film (Not offered in 2013-2014)
CAMS 277 Television Studio Production
CAMS 281 Digital Photography: Visual Description \& Storytelling (Not offered in 20132014)

CAMS 282 Graphic Design: Type + Image + Message
CAMS 283 Site-Specific Media: Out and About
CAMS 284 Digital Photography Workshop
CAMS 286 Animation (Not offered in 2013-2014)
CAMS 289 New Media Seminar in Europe: Digital Workshop (Not offered in 2013-2014)
c) Two History Courses (12 credits). One of these courses must be a film history course (either CAMS 210, 211 or 214).
ARTH 171 History of Photography (Not offered in 2013-2014)
ARTH 172 Modern Art: 1890-1945
ARTH 240 Art Since 1945
CAMS 210 Film History I
CAMS 211 Film History II
CAMS 214 Film History III (Not offered in 2013-2014)
CAMS 243 Film Sound Studies (Not offered in 2013-2014)
d) Two 300-level Seminars (12 credits).

CAMS 320 Sound Studies Seminar
CAMS 330 Cinema Studies Seminar (Not offered in 2013-2014)
CAMS 350 Visual Studies Seminar
e) Integrative Exercise CAMS 400 (6 credits)

Students considering a major in Cinema and Media Studies are strongly encouraged to take CAMS 110 Introduction to Cinema and Media Studies and CAMS 111 Digital Foundations by the end of their sophomore year and the two required core history courses (CAMS 210 Film History I, CAMS 211 Film History II, CAMS 214 Film History III, CAMS 243

Film Sound Studies or Art History 171, 172, 240) and at least one of two required 300-level seminar courses (CAMS 320 Sound Studies Seminar, CAMS 330 Cinema Studies Seminar and CAMS 350 Visual Studies Seminar) by the end of their junior year. Two 300-level seminar courses are offered every year.

Students interested in cinema studies should consider enrolling in the three-term film history sequence (CAMS 210 Film History I, CAMS 211 Film History II and CAMS 214 Film History III). At least two of these courses are offered every year and it is not necessary to take them in any particular order. CAMS 330 Cinema Studies Seminar, one of the department's required core seminar courses, is typically offered every year. Additional courses focus on film genres and modes (CAMS 186 Film Genres, CAMS 224 Classical American Film Comedy, CAMS 225 Film Noir: The Dark Side of the American Dream, CAMS 228 Avant-Garde Film and Video from Dada to the Beats) and national, transnational and global cinemas (CAMS 212 Contemporary Spanish Cinema, CAMS 216 American Cinema of the 1970s, CAMS 218 Contemporary Global Cinemas, CAMS 232 and 234 Cinema Directors, CAMS 237 Cinemas and Contexts: Russian Film, and CAMS 239 Cinemas and Contexts: East European Film). CAMS majors are also encouraged to choose courses from a rich array of extra-departmental offerings in film.

Students interested in digital film or television production should start with CAMS 111 Digital Foundations, proceed to 200-level production genre courses such as CAMS 270 Nonfiction I, CAMS 271 Fiction, CAMS 277 Television Studio Production and CAMS 286 Animation, and expect to execute advanced projects in digital film production in CAMS 370 Advanced Production Workshop, which is offered every spring term and can be taken multiple times.

Students interested in visual studies, including new media, digital photography and graphic design, are encouraged to enroll in courses such as CAMS 281 Digital Photography: Visual Description and Storytelling, CAMS 282 Graphic Design: Type + Image + Message, CAMS 283 Site-Specific Media: Out and About, CAMS 284 Digital Photography Workshop and CAMS 350 Visual Studies Seminar. Students pursuing work in these media may also consider enrolling in ARTS 141 Experimental Photography, ARTS 238 Photography I, and ARTS 339 Advanced Photo: Digital Imaging as well as related courses in film (CAMS 228 Avant-Garde Film and Video from Dada to Beats) and contemporary art history (ARTH 171 History of Photography, ARTH 172 Modern Art 1890-1945 and ARTH 240 Art Since 1945). Advanced projects in new media, digital photography and graphic design may be produced in CAMS 370 Advanced Production Workshop, which can be taken multiple times.

Students interested in sound studies, including sound design and audio production, can explore sound-image relationships and produce audio projects in courses such as MUSC 115 Music and Film, CAMS 188 Rock 'n' Roll Cinema, CAMS 242 Sound and Music in New Media, CAMS 243 Film Sound Studies, CAMS 265 Sound Design, CAMS 275 Audio Workshop and CAMS 320 Sound Studies Seminar. Advanced projects in audio may be produced in CAMS 370 Advanced Production Workshop, which is offered every spring term and can be taken multiple times.

## 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 2013-2014)
CAMS 265 Sound Design (Not offered in 2013-2014)
CAMS 270 Nonfiction I
CAMS 271 Fiction
CAMS 275 Audio Workshop (Not offered in 2013-2014)
CAMS 276 Fiction II: Producing and Directing the Short Film (Not offered in 2013-2014)
CAMS 277 Television Studio Production
CAMS 279 Screenwriting
CAMS 281 Digital Photography: Visual Description \& Storytelling (Not offered in 20132014)

CAMS 282 Graphic Design: Type + Image + Message
CAMS 283 Site-Specific Media: Out and About
CAMS 284 Digital Photography Workshop
CAMS 286 Animation (Not offered in 2013-2014)
CAMS 287 Stop Motion Animation
CAMS 289 New Media Seminar in Europe: Digital Workshop (Not offered in 2013-2014)
CAMS 370 Advanced Production Workshop
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 2013-2014)
ARTH 171 History of Photography (Not offered in 2013-2014)
ARTH 240 Art Since 1945
ARTS 141 Experimental Photography
ARTS 238 Photography I
ARTS 240 Introduction to Film and Digital Photography (Not offered in 2013-2014)
ARTS 339 Advanced Photo: Digital Imaging
ENGL 243 Text and Film (Not offered in 2013-2014)
ENGL 245 Bollywood Nation
ENGL 247 The American West (Not offered in 2013-2014)
ENGL 248 Visions of California
ENGL 362 Narrative Theory
FREN 250 Mali Program: Film and Society in Mali (Not offered in 2013-2014)
GERM 219 German Film after World War II (Not offered in 2013-2014)
HIST 285 Museums, Monuments, and Memory (Not offered in 2013-2014)
JAPN 231 Japanese Cinema in Translation
LCST 245 Introduction to Critical Methods: Structure, Gender, Culture
MUSC 115 Music and Film (Not offered in 2013-2014)
PHIL 229 Philosophy of Film and Emotion (Not offered in 2013-2014)
POSC 203 Political Communication: Election Campaign Advertising and Public Opinion
POSC 204 Media and Electoral Politics: 2010 United States Election (Not offered in 2013-2014)
POSC 220 Politics and Political History in Film (Not offered in 2013-2014)
POSC 303 Political Communication: Election Campaign Advertising and Public Opinion*
SPAN 256 Lorca, Buñuel and Dalí: Poetry, Film, and Painting in Spain (Not offered in 2013-2014)
THEA 320 Live Performance and Digital Media (Not offered in 2013-2014)

## Cinema and Media Studies Courses

110. Introduction to Cinema and Media Studies This course introduces students to the basic terms, concepts and methods used in cinema studies and helps build critical skills for analyzing films, technologies, industries, styles and genres, narrative strategies and ideologies. Students will develop skills in critical viewing and careful writing via assignments such as a short response essay, a plot segmentation, a shot breakdown, and various narrative and stylistic analysis papers. Classroom discussion focuses on applying critical concepts to a wide range of films. Requirements include two evening film screenings per week. Extra time. 6 credits, AL, WR; LA, WR2, Fall, Spring-J. Beck, C. Donelan
111. Digital Foundations This class introduces students to the full range of production tools and forms, building both the technical and conceptual skills needed to continue at more advanced levels. We will explore the aesthetics and mechanics of shooting digital video, the role of sound and how to record and mix it, field and studio production, lighting, and editing with Final Cut Pro. Course work will include individual and group production projects, readings, and writing. This is an essential foundation for anyone interested in moving-image production and learning the specifics of CAMS' studios, cameras, and lighting equipment. 6 credits, $A L ; A R P$, Fall, Winter, Spring-C. Cornejo, P. Hager, L. Jimsen
112. Film Genres In this course we survey four or more genres, including but not limited to the Western, the musical, the horror film, the comedy, and the science-fiction film. What criteria are used to place a film in a particular genre? What role do audiences and studios play in the creation and definition of film genres? Where do genres come from? How do genres change over time? What roles do genres play in the viewing experience? What are hybrid genres and subgenres? What can genres teach us about society? Assignments aim to develop skills in critical analysis, research and writing. 6 credits, AL, WR; LA, WR2, Not offered in 2013-2014
113. Rock ' n ' Roll in Cinema This course is designed to explore the intersection between rock music and cinema. Taking a historical view of the evolution of the "rock film," this class examines the impact of rock music on the structural and formal aspects of narrative, documentary, and experimental films and videos. The scope of the class will run from the earliest rock films of the mid-1950s through contemporary examples in ten weekly subunits. 6 credits, AL; LA, IDS, Winter-J. Beck
114. 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, $A L ; L A, I S$, Fall-C. Donelan
115. 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, $A L, R A D ; L A$, IS, Winter-C. Donelan
116. Contemporary Spanish Cinema This course serves as a historical and critical survey of Spanish cinema from the early 1970s to the present. Topics of study will include the redefinition of Spanish identity in the postFranco era, the rewriting of national history through cinema, cinematic representations of gender and sexuality, emergent genres, regional cinemas and identities, stars and transnational film projects, and the emergence of new Spanish auteurs from the 1980s to the present. 6 credits, AL; LA, IS, Spring-J. Beck
117. 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, Not offered in 2013-2014
118. 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, Not offered in 2013-2014
119. 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, Not offered in 2013-2014
120. Classical American Film Comedy This course serves as a historical and critical survey of American film comedy from the late silent era through the end of the classical Hollywood period. It is designed to study the evolution of sound film comedy from its origins in slapstick and vaudeville-based skit routines through the sophisticated dialogue and screwball comedies of the 1930s and the social commentary comedies of the 1940s and 50 s. The term will be spent studying the evolution of forms of film comedy, understanding how the genre has changed, and examining the social/historical factors that account for these changes. 6 credits, $A L ; L A, I D S$, Not offered in 2013-2014
121. 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 1930s cinema seemed hollow indeed. During the 1940s, 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 focuses on classical and neo-noir from a variety of perspectives, including genre and mode, visual style and narrative structure, postwar culture and politics, and gender and race. 6 credits, AL; LA, IDS, Spring-C. Donelan
122. Avant-Garde Film \& Video from Dada to the Beats This class charts avant-garde film, photography and design from Salvadore Dali's surrealist cinema in the 1920s to the flowering of Beat culture in the 1950s. Key monuments are read against the progression of the art historical styles and "-isms" that informed them. We will take an extended look at Beat Culture in the 1950s as a context for the emergence of the American avantgarde. Expect to view rare original prints at the Walker Art Center and make your own experimental film. 6 credits, AL; LA, Offered in alternate years, Not offered in 2013-2014
123. Cinema Directors: Tarkovsky This course addresses the legacy of Russian film director and cult figure Andrei Tarkovsky, his contribution to the revival of Russian cinema and film theory, and his influence on other filmmakers--in Russia and around the world. Readings will focus on Tarkovsky's own writing about film and art. Close analysis of the films (Ivan's Childhood, Andrei Rublev, Mirror, Stalker, Nostalghia, Sacrifice) will be supplemented by consideration of Tarkovsky's sources--from Leonardo DaVinci to his own father, poet Arsenii Tarkovsky. 3 credits, AL; LA, IS, Offered in alternate years, Not offered in 2013-2014
124. Cinema Directors: Sokurov Mentored by Tarkovsky, influenced by the German Expressionists Dovzhenko and Bresson, but essentially self-made as a director, Aleksandr Sokurov delights and perplexes viewers with cinematic canvases of exceptional beauty and emotion. He also offers us a media sandbox for analyzing everything from screenplay writng to sound production, from painting to photography, and theories of visuality in-between. Of Sokurov's 57 films (documentary and fiction) made over 30 years and already influencing younger directors around the world we will focus on those grouped around his "power" cycle. Inclass analyses, short writing assignments. No knowledge of Russian lanaguage or Russian studies required. 3 credits, AL; LA, IS, Offered in alternate years, Winter-D. Nemec Ignashev
125. Cinemas \& Contexts: Russian Film The Russian school of filmmaking developed in a socio-political context that indelibly marked its production. Fortunately, the Russian school's achievements have exceeded the limitations of time, politics, and national boundaries, to this day influencing filmmakers around the world. This course examines major moments in Russian cinema history. Readings and brief lectures situate films in their historical and political contexts; discussion and close analysis explore technological innovation and the theories underlying them. The survey concludes with consideration of the Russian school's significance particularly for
emerging cinemas in Cuba, China, Africa, and post-Soviet Central Asia. 6 credits, $A L$; LA, IS, Offered in alternate years, Not offered in 2013-2014
126. Cinemas and Contexts: East European Film This course surveys the "other cinemas" of Europe: of Poland, the Czech Republic, Finland, Hungary, Romania, the states of the former Yugoslavia, and Turkey, from WWII through the present day. Directors include Bilge Ceylan, Chytilová, Forman, Holland, Jancsó, Kaurismäki, Kieslowski, Kovács, Kusturica, Loznitsa, Makavejev, Menzel, Muratova, Nemec, Polanski, Svankmajer, Szabó, Tarr, Wajda. Brief lectures and readings place the films in national and politcal context, discussions focus on analyzing the eclectic cinematic strategies and diversity of styles--from Hollywood, Western Europe, Soviet and auteur--these filmmakers have employed in their anthological masterpieces of the cinematic canon. 6 credits, AL; LA, IS, Offered in alternate years, Fall-D. Nemec Ignashev
127. Sound and Music in New Media This course covers the theory and production of sound and music in radio, electronic soundscapes, electroacoustic music, and film and video. The course will focus on the aesthetics, theory and practice of sound in these media. 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 helpful but not required. 6 credits, AL; ARP, Offered in alternate years, Not offered in 20132014
128. Film Sound Studies 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, AL; LA, Offered in alternate years, Not offered in 2013-2014
129. Sound Design This course examines the theories and techniques of sound design for film and video. Students will learn the basics of audio recording, sound editing and multi-track sound design specifically for the moving image. The goal of the course is a greater understanding of the practices and concepts associated with soundtrack development through projects using recording equipment and the digital audio workstation for editing and mixing. 6 credits, AL; ARP, Offered in alternate years, Not offered in 2013-2014
130. Understanding New Media This edition of Understanding New Media will be organized around our extensive engagement with the exhibitions, artists and critics we will encounter in our travels. The class will mix reading, discussion and critique. Because access to the wireless Internet is widespread in Europe, students are encouraged to equip their laptops with wireless cards in order that we can easily conduct research on the Net and post individual critical responses to our class weblog. 6 credits, AL; LA, Offered in alternate years, Not offered in 2013-2014
131. Nonfiction I This course addresses nonfiction media as both art form and historical practice by exploring the expressive, rhetorical, and political possibilities of nonfiction production. A focus on relationships between form and content and between makers, subjects, and viewers will inform our approach. Throughout the course we will pay special attention to the ethical concerns that arise from making media our of others' lives. 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 significant nonfiction media project. Prerequisite: Cinema and Media Studies 111 or permission of instructor. 6 credits, $A L$; ARP, Fall-L. Jimsen
132. Fiction Through a series of exercises students will explore the fundamentals of making fictional media, including framing, staging, camera movement, working with actors, traditional 3 -act structure, and alternative approaches. Through course readings, screenings, and writing exercises, we will analyze how mood, tone, and themes are constructed through formal techniques. Group and individual exercises will develop diverse strategies for narrative construction and cinematic storytelling. The course will culminate in individual short fiction projects. Prerequisite: Cinema and Media Studies 111 or permission of instructor. 6 credits, $A L ; A R P$, Offered in alternate years, Winter-L. Jimsen
133. 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 2013-2014
134. 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. Prerequisite: Cinema and Media Studies 271, or permission of the instructor; Cinema and Media Studies 279 strongly recommended. 6 credits, AL; ARP, Not offered in 2013-2014
135. Television Studio Production In this hands-on studio television production course, held in the new, fullyoutfitted Weitz Center studios, students learn professional studio methods and techniques for creating both fiction and nonfiction television programs. Concepts include lighting and set design, blocking actors, directing cameras, composition, switching, sound recording and scripting. Students work in teams to produce four assignments, crewing for each other's productions in front of and behind the camera, in the control room, and in post-production. 6 credits, AL; ARP, Winter-P. Hager
136. Writing for Television TV is a very specific, time-driven medium. Using examples from scripts and DVDs, students will learn how to write for an existing TV show, keeping in mind character consistency, pacing, tone, and compelling storylines. Students will also get a taste of what it's like to be part of a writing staff as the class itself creates an episode from scratch. Topics such as creating the TV pilot, marketing, agents, managers, and more will be discussed. Finally, general storytelling tools such as creating better dialogue, developing fullyrounded characters, making scene work more exciting, etc., will also be addressed. Prerequisite: Cinema and Media Studies 110 or permission of the instructor. 6 credits, AL; ARP, Offered in alternate years, Not offered in 2013-2014
137. Screenwriting This course teaches students the fundamentals of screenwriting. Topics include understanding film structure, writing solid dialogue, creating dimensional characters, and establishing dramatic situations. Art, craft, theory, form, content, concept, genre, narrative strategies and storytelling tools are discussed. Students turn in weekly assignments, starting with short scenes and problems and then moving on to character work, synopses, outlines, pitches and more. The goal is for each student to write a 15 to 25 page script for a short film by the end of the term. Prerequisite: Cinema and Media Studies 110 or permission of the instructor. 6 credits, ARP, Offered in alternate years, Fall-M. Elyanow
138. 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, Not offered in 2013-2014
139. 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, $A L$; ARP, Winter-J. Schott
140. 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 multitrack 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
141. Digital Photography Workshop This edition of the workshop will focus on photographic portraiture. Students will begin reading on the history and theory of portraiture and representation in photography, art, and cinema. With this grounding, they will undertake multiple creative portrait assignments in a wide variety of styles, including street styles, studio set-ups and lighting, editorial/fashion, documentary portraiture, and conceptual projects. This class will take advantage of the new CAMS studios in The Weitz Center for Creativity. Students should have their own digital camera; software is provided. 6 credits, $A L$; ARP, Winter-J. Schott
142. Animation Animation will explore both traditional, handmade animation and computer-based animation software. The course will emphasize skills in observation, perception, and technique using both old and new technologies. Exercises will build skills in creating believable and cinematic locomotion, gesture, and characters in diverse media including drawing by hand on cards, software-based animation, and stop-motion. The final project gives students the opportunity to develop more advanced skills in one, or a combination, of the techniques covered in class to create a self-directed animation project. Prerequisite: Cinema and Media Studies 111, one Cinema and Media Studies 200-level studio production course, or permission of instructor. 6 credits, AL; ARP, Offered in alternate years, Not offered in 2013-2014
143. Stop Motion Animation Stop-motion animation exists at the intersection of cinema, dance, and sculpture. In this class, students will experiment with a variety of front-of-camera animation techniques to build sensitivity and gain proficiency in this unique manipulation of materials and time. We will explore clay, object, and hingedpaper puppet traditions as well as other sculptural methods. Exercises will emphasize movement strategies and cinematic concerns such as mise-en-scene and figure-ground relationships as they relate specifically to stop motion. Students will each pitch and complete a final animation project exploring these concepts in depth. Prerequisite: Cinema and Media Studies 111 and one Cinema and Media Studies 200-level studio production course, or permission of instructor. 3 credits, ARP, Winter-B. Johnson
144. New Media Seminar in Europe: Digital Workshop Creative new media projects will be tailored to each student's skill set and technical resources, and students will be encouraged to work in teams where appropriate. Descriptive and conceptual or web-based projects in photography will be at the center of the seminar, but students may also work in video and other new media forms. Students are encouraged to take an introductory course in a medium of their choice at Carleton before the seminar. 6 credits, AL; ARP, Offered in alternate years, Not offered in 2013-2014
145. 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 2013-2014
146. Sound Studies Seminar This course presents the broader field of Sound Studies, its debates and issues. Drawing on a diverse set of interdisciplinary perspectives, the seminar explores the range of academic work on sound to examine the relationship between sound and listening, sound and perception, sound and memory, and sound and modern thought. Topics addressed include but are not limited to sound technologies and industries, acoustic perception, sound and image relations, sound in media, philosophies of listening, sound semiotics, speech and communication, voice and subject formation, sound art, the social history of noise, and hearing cultures. 6 credits, AL; LA, Offered in alternate years, Winter-J. Beck
147. Cinema Studies Seminar The purpose of this seminar is guide students in developing and consolidating their conceptual understanding of theories central to the field of cinema studies. Emphasis is on close reading and discussion of classical and contemporary theories ranging from Eisenstein, Kracauer, Balazs, Bazin and Barthes to theories of authorship, genre and ideology and trends in contemporary theory influenced by psychoanalysis, phenomenology and cognitive studies. Prerequisite: At least one film history course (Cinema and Media Studies 211, 212 or 214) or permission of instructor. 6 credits, LA, Offered in alternate years, Not offered in 2013-2014
148. Visual Studies Seminar Images abound: contemporary life increasingly is defined by the pervasiveness of visual images which inform, entertain, document, manipulate, 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, photography and contemporary media. Prerequisite: Cinema and Media Studies 110 or permission of instructor. 6 credits, LA, Offered in alternate years, Fall-J. Schott
149. Advanced Production Workshop Working in a variety of genres and technical formats, students design, test, and execute an in-depth, individual media project during the course of the term. Students are expected to work at advanced technical and conceptual levels to expand specific skills and aesthetics. Weekly class critiques will help students develop formal approaches, audio and visual language, and work flows specific to their projects. As students enter the production and post-production phases, further critiques will help them shape their material for the greatest, most precise expression. Students may enroll in this course multiple times. Prerequisite: Cinema and Media Studies 111 and at least one 200 -level production course. 6 credits, $A L$; ARP, Spring-L. Jimsen
150. Integrative Exercise 6 credits, S/NC, ND, Fall, Winter—Staff

## CLASSICAL LANGUAGES

Courses in the Department of Classical Languages cover numerous aspects of the ancient Greco-Roman 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 required for the major. Completion of the Greek and Latin sequences, 101, 102, 103, and 204, fulfills the college language requirement.

## Requirements for the Major

Classical majors choose one of four tracks:
Classical Studies: This track is intended for students who want a broad introduction to classical civilization. Students anticipating further work in classics should supplement the requirements of this track 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 studentâ??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.

Greek: This track 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 track 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.

Latin: This track 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.

Classical Languages: This track 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.

Majors from all four tracks must submit the junior skills portfolio in their junior year, and take Classics 394 and Classics 400 in 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. Killing Socrates Socrates is revered as the fountainhead for much of Western philosophical thought, so why did a jury of 500 Athenian citizens condemn him to death in 399 BCE? While we tend to think of Socrates strictly as a philosopher, this course will focus more on the type of man he was, and the problems he presented to the city of Athens in the late fifth century. In short, we'll be doing some critical thinking about one of the world's great critical thinkers. Readings from Greek drama, history and philosophy. 6 credits, AI, WR1, Fall-C. Hardy
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, Not offered in 2013-2014
111. Classical Mythology Myth was an integral component of thought, both individual and societal, in the ancient cultures of Greece and Rome. We will study a selection of the most famous Classical myths through
close reading of Homer, the Greek tragedians, Ovid and other ancient sources. In addition we'll discuss the most prominent of modern modes of myth interpretation, in an attempt to determine how myth speaks -- both to the ancient world and to us. 6 credits, AL; LA, Not offered in 2013-2014
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. 6 credits, AL, WR; LA, WR2, Fall-C. Zimmerman
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, AL; ARP, Not offered in 2013-2014
119. Pompeii and the Cities of Vesuvius Pompeii and the other cities destroyed by Vesuvius are very different from other archaeological sites in terms of their destruction, excavation and preservation. This course aims to introduce students to the wealth of evidence from Pompeii that can be used to examine Roman urban life, but also to make them aware of the problems that affect our knowledge and interpretation of this evidence. Topics will include: the eruption of Vesuvius; history and urban development; architecture; domestic and public life; neighborhoods and villas; graffiti; entertainment; death and burial. We will also look at current conservation issues that affect the archaeological remains. 6 credits, HU; HI, IS, Not offered in 2013-2014
121. Greek Art and Archaeology This course provides a survey of the art, architecture, and archaeology of the ancient Greek world, as well as an introduction to archaeological methods. The evolution and development of Greek material culture will be tracked chronologically from Prehistory to the Hellenistic Age. Major monuments and the minor arts will be examined from sites such as Mycenae, Knossos, Athens, Delphi, and Olympia. The goal of this course is to equip students with the analytical skills necessary to interpret material culture and learn how to use archaeological remains to reconstruct various aspects of culture and society. 6 credits, WR; HI , WR2, Offered in alternate years, Winter-D. Moore
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, $A L$; LA, Not offered in 2013-2014
127. Ancient Technology Technology--humanity's efforts to manipulate its physical environment--stands as a central concern of the modern world. This course examines the technology of the ancient world and investigates its integral relationship to other facets of human activity. Theories of technological change will be explored initially in order to develop a socially-informed understanding of technology. In the second part, students will investigate specific ancient technologies using archaeological and textual evidence and present their findings to the class. The goal of this course is to understand technology as a social phenomenon in both the ancient and modern worlds. 6 credits, HI, QRE, Spring-D. Moore
173. Sport and Daily Life This course is an exploration of life, death, and entertainment in the ancient world, particularly in Rome. We will focus especially on how and why people take part in sporting events and on how sport intersected with gender, social class, and economic concerns in the ancient world. Topics include the history of sport, slavery and marginal groups, demography, gladiatorial and combat events, and entertainment and politics. Our primary focus in lecture and discussion will be interpretation of a variety of ancient sources, but we will also evaluate modern views of ancient entertainment. 6 credits, HI, IS, QRE, Fall-K. Steed
214. 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. Primary readings from Greek and Roman epic, lyric, and drama, as well as ancient historical, philosophical, and medical writers; in addition we will explore a range of secondary work on the topic from the perspectives of Classics and Gender Studies. 6 credits, WR; HI, WR2, IS, Spring-C. Hardy
222. Nature and the Environment in the Ancient World As moderns, we often think of Nature as an ancient concept. But how old is our idea of the Natural exactly, and what did people think about the environment before the advent of environmentalism, Romanticism, and Christianity as prevailing modes of Western thought? This course will explore how Greeks and Romans conceived of and engaged with their natural environment(s), with special attention to the ways in which ancient ideas differ from modern ones. Using textual and material sources, we will examine ancient attitudes towards nature and the environment through literature, philosophy, religion, politics, science, etc. 6 credits, HU, WR, RAD; HI, WR2, IS, QRE, Not offered in 2013-2014
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 ( $336-323 \mathrm{BC}$ ) and the legacy of international monarchies that followed. 6 credits, HU, WR; HI, WR2, IS, Winter-K. Steed
228. The Roman Republic Introduction to Rome's political and social history from the Etruscan period to the end of the Republic. Topics include Roman political culture, the acquisition of empire, the role of the army, the psychology of Rome, and interpretation of historical evidence. Based largely on primary source readings. 6 credits, HU, WR, RAD; HI, WR2, IS, Not offered in 2013-2014
230. Greeks Go Global: The Hellenistic World This course examines the transformation of the Greek world from the classical city-state to the multicultural Hellenistic monarchy. The first part of the course examines the developments of the fourth century BCE, including classical philosophy, politics, and art; the rise of Macedon; Alexander the Great; and the wars of Alexander's successors. The second part explores the philosophical, cultural, and scientific world of Ptolemaic Egypt. The course focuses throughout on how the Greeks came to grips with a rapidly changing world in which the individual was subordinated to the absolute and impersonal power of kings. 6 credits, HU; HI, IS, QRE, Not offered in 2013-2014
231. The Roman Principate This class is an introduction to the history of Rome from the accession of the first Roman emperor Augustus in 31 BCE to the death of Severus Alexander in 235 CE. It examines the political and military events of the period (including the reigns of individual emperors like Augustus, Nero and Hadrian), as well as themes such as the nature of imperial power and the image of the emperor, social and economic structures, the nature and administration of empire and the relationship between central power and local cultures. Based largely on primary source readings and appropriate visual/material evidence. 6 credits, $\mathrm{HU} ; \mathrm{HI}$, IS, Not offered in 2013-2014
251. Translation Theory and Practice We live in a world permeated by different languages at every level--from literary texts to multilingual instruction manuals, from newspapers and books to songs and films--and we all translate every day, whether we know it or not. This course aims to examine major issues related to translation, including its history, theory, and practice, as well as what ideological and ethical concerns translation poses today. We will also explore translation's relationship to issues of literature, religion, culture, race and ethnicity, and sex and gender. Prerequisite: Competence in any language other than English beyond four terms of study, or permission of the instructor. 6 credits, HU, WR, RAD; HI, WR2, IS, Not offered in 2013-2014
394. 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. 3 credits, ND; NE, Fall-C. Zimmerman
400. 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, $S / N C, N D$, Winter-C. Zimmerman

## 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,
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. Zimmerman
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—D. Moore
204. Greek Poetry Selected readings from Homer (in odd-numbered years) or Greek Tragedy (in evennumbered years). Prerequisite: Greek 103 with a grade of at least C-. 6 credits, ND; NE, Winter-K. Steed
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 2013-2014
240. Xenophon's Oeconomicus Xenophon's Oeconomicus is a fascinating text preserving valuable primary evidence on Classical Athenian attitudes toward gender, household management, marital relations, slavery, urban and rural domestic life, and household religion among many other topics. We will read selections of the Greek and the whole in English, as well as some of the very interesting secondary literature--from Foucault to Leo Strauss--in this unique work. Prerequisite: Greek 204 or the equivalent. 6 credits, $A L ;$ LA, IS, Not offered in 2013-2014
245. Herodotus's Histories In this course we will read and examine selections from Herodotus's Histories in Greek, as well as the whole of the work in English. We will explore questions about historiography, culture, ethnicity, ancient warfare, contact between Greece and Persia, among other issues. Prerequisite: Greek 204 or the equivalent. 6 credits, $A L, W R ;$ LA, WR2, Not offered in 2013-2014
248. Ancient Greek Composition Practice in composing Greek prose. Prerequisites: Greek 103 or any higherlevel Greek course. 3 credits, AL; NE, Not offered in 2013-2014
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-K. Steed
305. Homer Intensive study of selections from Homer's lliad or Odyssey. Offered simultaneously with Greek 204, with additional assignments for the advanced students. Prerequisite: Greek 204 or the equivalent. 6 credits, AL; LA, Offered in alternate years, Not offered in 2013-2014
351. Aristophanes Intensive study of one or two plays in the original and of the remaining plays in translation. 6 credits, AL; LA, Spring-D. Moore
352. Thucydides Study in the original of selections from Thucydides Peloponesian War and in translation of the entire work. Prerequisite: Greek 204. 6 credits, AL; HI, Not offered in 2013-2014

## 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-R. Hardy
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. Hardy
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, Spring-Staff
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-D. Moore
233. Catiline In this course we will explore the life, career, and defeat of L. Sergius Catilina as portrayed in Sallust's Catiline and Cicero's Catilinarian Orations. We will supplement our Latin with reading in translation and secondary articles. Prerequisite: Latin 204 or equivalent. 6 credits, LA, Fall-K. Steed
242. Apuleius, Selections from the Golden Ass in the original as well as reading the entire work in English translation. Prerequisite: Latin 204. 6 credits, AL; LA, Not offered in 2013-2014
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 three-four years may also register upon taking the Latin placement exam. 6 credits, AL; LA, Not offered in 2013-2014
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 2013-2014
248. Latin Composition Practice in composing Latin prose. Prerequisites: Latin 103 or any higher-level Latin course. 3 credits, AL; NE, Not offered in 2013-2014
253. Seneca the Younger Seneca the Younger was a key figure in the reigns of the Roman Emperors, Claudius and Nero. He was a prolific writer and a major force in shaping the moral philosophy of the later Roman world. This course will examine Seneca's thought and lively writing style by reading samples from a broad selection of his prose works (philosophical essays and letters) as well as his tragedies. There will be a short paper (six-eight pages) in addition to other assignments designed to familiarize students with some of the research tools and practices of the discipline. Prerequisite: Latin 204 (or equivalent). 6 credits, AL; LA, Not offered in 2013-2014
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. 6 credits, AL; HI, Not offered in 2013-2014
257. Caesar, Lucan, and Civil War This course will examine narratives of the early stages of the Roman Civil War through contemporary prose accounts of Caesar and Cicero and the poet Lucan's Neronian epic on the Civil War. Topics will include manipulation of public opinion and memory, historical reconstruction through text, the relationship between prose history and historical epic, and the literal and metaphorical dissolution of Rome through civil war, as well as stylistic and philosophical concerns specific to each author. Prerequisite: Latin 204 (or equivalent). 6 credits, HU; HI, IS, Not offered in 2013-2014
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, AL; LA, Winter-C. Zimmerman
259. Seminar: Vergil Intensive study of selections from Vergil. Offered simultaneously with Latin 359 without the supplemental assignments for advanced students. Prerequisite: Latin 204 or the equivalent. 6 credits, $A L$, WR; LA, WR2, Not offered in 2013-2014
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, Not offered in 2013-2014
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 above. 6 credits, AL; LA, Not offered in 2013-2014
349. Ovid's Fasti Reading Ovid's Fasti-a poem about the origins, practice, and significance of ancient holidays--we will explore how Romans approached ideas of sacred time and space, both conceptually and practically. We will consider a variety of related issues, including ancient religion, calendars, etymology, and origin stories. We will also examine how issues of sex and gender, public and private worship, politics, propaganda, and competing ideologies are reflected and challenged in the process of creating and explaining holiday and festival occasions. Supplemental readings in Catullus, Vergil, Livy, and other of Ovid's poems. Prerequisite: Latin 204 or equivalent. 6 credits, AL, WR; LA, WR2, Not offered in 2013-2014
359. Vergil Intensive study of selections from Vergil. Offered simultaneously with Latin 259, with additional assignments for the advanced students. Prerequisite: Latin 204 or the equivalent. 6 credits, $A L, W R ; L A, W R 2$, Not offered in 2013-2014

## COGNITIVE SCIENCE CONCENTRATION (CGSC)

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, artificial intelligence, neuroscience, social cognition, anthropology, education 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.

A special major is also available through a petition to the Academic Standing Committee. See our website for more information.

## Requirements for the Concentration

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
A second alternative entry point into the concentration is enrollment in the BiologyPhilosphy or Biology-Cognitive Science DYAD--linked sections of Biology 125 and Philosophy 100/CGSC 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 368 Developmental Neurobiology
BIOL 369 Developmental Neurobiology Laboratory (Not offered in 2013-2014)
BIOL 379 Seminar: Behavioral Genetics
BIOL 386 Neurobiology
CGSC 100 How We Make Important Decisions
CGSC 236 Thinking, Reasoning, and Decision Making: Experimental Approaches (Not offered in 2013-2014)
CGSC 380 Seminar in Developmental Psychology: Cognitive Development During the

Preschool Years (Not offered in 2013-2014)
CGSC 385 Cognitive Development in Middle Childhood (Not offered in 2013-2014)
CGSC 386 Adolescent Cognitive Development: Developing an Identity and Life Plans
CS 254 Computability and Complexity
CS 321 Artificial Intelligence
CS 322 Natural Language Processing
CS 361 Evolutionary Computing and Artificial Life (Not offered in 2013-2014)
ECON 265 Game Theory and Economic Applications
ECON 266 Experimental Economics
ECON 267 Behavioral Economics
EDUC 234 Educational Psychology
LING 216 Generative Approaches to Syntax
LING 217 Phonetics and Phonology
LING 265 Language and Brain (Not offered in 2013-2014)
LING 275 First Language Acquisition (Not offered in 2013-2014)
LING 315 Topics in Syntax (Not offered in 2013-2014)
LING 316 Topics in Morphology (Not offered in 2013-2014)
LING 317 Topics in Phonology (Not offered in 2013-2014)
LING 325 Syntax of an Unfamiliar Language
LING 340 Topics in Semantics (Not offered in 2013-2014)
MUSC 227 Introduction to the Perception and Cognition of Music (Not offered in 20132014)

PHIL 100 Science, Faith and Rationality
PHIL 112 Mind, Matter, Consciousness (Not offered in 2013-2014)
PHIL 212 Epistemology (Not offered in 2013-2014)
PHIL 223 Philosophy of Language
PHIL 225 Philosophy of Mind (Not offered in 2013-2014)
PHIL 228 Heaps of Liars: Logic, Language, and Metaphysics
PSYC 216 Behavioral Neuroscience
PSYC 220 Sensation and Perception
PSYC 234 Psychology of Language (Not offered in 2013-2014)
PSYC 238 Memory Processes
PSYC 250 Developmental Psychology
PSYC 258 Social Cognition
PSYC 362 Psychology of Spoken Words (Not offered in 2013-2014)
PSYC 366 Cognitive Neuroscience (Not offered in 2013-2014)
PSYC 371 Evolutionary and Developmental Trends in Cognition (Not offered in 20132014)

PSYC 372 Perceptual \& Cognitive Expertise
PSYC 375 Language and Deception
SOAN 260 Myth, Ritual, and Symbolism
SOAN 274 Language, Culture and Society (Not offered in 2013-2014)

## Cognitive Science Courses

100. How We Make Important Decisions This Argument and Inquiry seminar will focus on how individuals and groups of people make important decisions, both personal and professional, and how teams of people make policy decisions. We'll look at reasoning and decision-making from a variety of frameworks, including those of formal logic, cognitive psychology, social psychology, scientific hypothesis testing, business management. Case
studies of major political, economic, or technology policy decisions will be examined and discussed. Students will also analyze and reflect on their own academic and career decisions, learning to describe and explore different decision-making styles and approaches. 6 credits, AI, WR1, Fall-K. Galotti
101. How to Build A Mind: An Introduction to Cognitive Science Cognitive science is a multidisciplinary field of inquiry involving biology, computer science, linguistics, philosophy and psychology whose aim is to understand the nature of the human mind. This course will explore current models of human cognition, including artificial intelligence, connectionism, modularity theory, dynamical systems, robotics and embodied cognition. Specific topics to be explored from these perspectives include the nature of mental representation. consciousness, reasoning, language and vision. 6 credits, HU; HI, Spring-R. Elveton
102. Rationality, Intuition, and the Nature of Mind: An Introduction to Cognitive Science An inerdisciplinary 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 pracive of the newly-emerging field of cognitive science. 6 credits, WR; SI, WR2, Not offered in 2013-2014
103. 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. Corequisite: Psychology 233. A grade of C- or better must be earned in both Cognitive Science 232 and 233 to satisfy the LS requirement. Prerequisite: Psychology 110 or permission of the instructor. 6 credits, SS, WR; LS, WR2, Winter-K. Galotti
104. 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 Psychology/Cognitive Science 232 and 233 to satisfy the LS requirement. 2 credits, ND; LS, Winter-K. Galotti
105. Thinking, Reasoning, and Decision Making: Experimental Approaches In this course, we will learn about the cognitive science of high-level mental processes, viz., thinking, reasoning, and decision making, with a special focus on reasoning within the context of moral decision making. In addition to learning about what is already known concerning the operation of high-level mental processes, students will have the opportunity to take part in the design and implementation of one or more experimental studies that may add to our knowledge of such processes. Prerequisite: Any Cognitive Science 100-level course or permission of the instructor. 6 credits, SS; SI, QRE, Not offered in 2013-2014
106. Embodied Cognition This seminar will consider recent work in philosophy, cognitive science and linguistics critical of views of human cognition as "disembodied" and Cartesian. Philosophical sources of the early critiques of symbolic Al and "cartesianism" will be considered (Heidegger, Dewey), as will the linguistic theories of George Lakoff and Ray Jackendoff and recent and current work on embodied cognition by Eleanor Rosch, Hubert Dreyfus, John Haugeland, Andy Clark and Herbert Brooks. The seminar will include materials relevant to students in philosophy, linguistics, psychology and cognitive science. Prerequisite: Cognitive Science 130, or Cognitive Science/Psychology 232 or permission of the instructor. 6 credits, HI, Winter-R. Elveton
107. 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, Not offered in 2013-2014
108. 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 2013-2014
109. 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 life-framing 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, Fall-K. Galotti
110. 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-K. Galotti

## COMPUTER SCIENCE (CS)

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. Carletonâ??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, (or 257), 208, 251, 252, and 254; and two additional courses from among Computer Science courses numbered 200 or above. Although they are not required for the CS major, we recommend that our students take as many mathematics and statistics courses as possible. 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, 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

99. Summer Computer Science Institute Computer science is a rich academic field that seeks to
systematically study the processes for solving problems and untangle the complexities in the concrete physical world and the abstract mathematical world. The Summer Computer Science Institute (SCSI) at Carleton focuses on understanding how to think about these processes, how to program computers to implement them, and how to apply computer science ideas to real problems of interest. Students at SCSI will learn how to systematically approach problems like a computer scientist as they engage in classroom learning, hands-on lab activities, and collaborative guided research. 6 credits, S/CR/NC, Summer-Staff
100. Human Centered Computing Technology permeates every aspect of our lives: how we work, play, and communicate; our finances and health; etc. Technology can facilitate these, or make it difficult to perform simple tasks or express what we want to accomplish. We'll take a critical look at the interfaces between technology and people, examining what makes these user interfaces effective, practicing key design principles through case studies and design projects, and discussing legal, ethical, and social issues in interface design, particularly the accessibility, privacy, and environmental impacts. No computer science experience is necessary. 6 credits, Al, WR1, QRE, Fall-A. Csizmar Dalal
101. 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 who-preys-on-whom relationship. We will explore mathematical properties of networks while emphasizing the efficient processing and analysis of network data drawn from a variety of fields. Topics include: how Google works; "six degrees of separation"; the spread of fads through society. No background in computer science or programming is required or expected. No prerequisites. Students may not simultaneously enroll in Computer Science 108 and Computer Science 111 in the same term, and students who have received credit for Computer Science 111 or above are not eligible to enroll in Computer Science 108. 6 credits, FSR, QRE, Offered in alternate years, Fall-D. Liben-Nowell
102. 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. Students may not simultaneously enroll for CS 108 and CS 111 in the same term. 6 credits, MS; FSR, QRE, Fall, Winter, Spring-Staff
103. 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
104. 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, Fall, Winter-D. Musicant, D. Liben Nowell
105. 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, Spring-S. Goings, J. Ondich
106. Computer 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 or 202 or 208. 6 credits, FSR, Offered in alternate years, Not offered in 2013-2014
107. Programming Languages: Design and Implementation 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 oftopics 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, Winter-D. Musicant
108. 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). Along the way, we will explore the application of these techniques to a variety of domains (natural language processing, economics, computational biology, and data mining, for example). As time permits, we will include supplementary topics like randomized algorithms, advanced data structures, and amortized analysis. Prerequisite: Computer Science 201 and either Computer Science 202 or Mathematics 236. 6 credits, MS; FSR, Fall, Winter-J. Miles
109. Computability and Complexity An introduction to the theory of computation. What problems can and cannot be solved efficiently by computers? What problems cannot be solved by computers, period? Topics include formal models of computation, including finite-state automata, pushdown automata, and Turing machines; formal languages, including regular expressions and context-free grammars; computability and uncomputability; and computational complexity, particularly NP-completeness. Prerequisite: Computer Science 111 and either Computer Science 202 or Mathematics 236. 6 credits, MS; FSR, Fall, Spring-J. Davis
110. 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 mediumsized 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 201 or consent of the instructor. 6 credits, MS; FSR, Fall, Spring-J. Ondich,

## A. Csizmar Dalal

311. 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, Not offered in 2013-2014
312. Medical Image Analysis A survey of current techniques in brain-structure modeling from a type of imaging scan called "diffusion MRI." The course covers a computational pipeline that translates MRI images into neuroscience insights. In addition to brief introductions to MRI physics and neuroscience applications of this technology, we will read current papers on diffusion MRI analysis and implement selected algorithms from them. Various computer-science topics will be discussed as they apply to MRI analysis, potentially including: mathematical modeling; linear, nonlinear, and combinatorial optimization; statistical inference; numerical integration; graph clustering; simple parallel and distributed computational techniques; and scientific visualization. Prerequisite: Computer Science 201 and Mathematics 211. A statistics course (Mathematics 115 or 215) and Mathematics 232 are highly recommended, as is a willingness to learn new mathematical concepts at a fairly rapid pace. 6 credits, NE, Winter-J. Miles
313. 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 search computer game playing, automated logic, machine learning (including neural networks), and reasoning with uncertainty. The coursework is a mix of problem solving and computer programming based on the ideas that we discuss. Prerequisite: Computer Science 201, additionally Computer Science 202 or Mathematics 236 are strongly recommended. 6 credits, MS; FSR, Offered in alternate years, Spring-A. Exley
314. 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-A. Exley
315. Data Mining How does Google always understand what it is you're looking for? How does Amazon.com figure out what items you might be interested in buying? How can categories of similar politicians be identified, based on their voting patterns? These questions can be answered via data mining, a field of study at the crossroads of artificial intelligence, database systems, and statistics. Data mining concerns itself with the goal of getting a computer to learn or discover patterns, especially those found within large datasets. We'll focus on techniques such as classification, clustering, association rules, web mining, collaborative filtering, and others. Prerequisite: Computer Science 201. Additionally, Computer Science 202 or Mathematics 236 strongly recommended. 6 credits, FSR, QRE, Offered in alternate years, Not offered in 2013-2014
316. Computer Networks The Internet is composed of a large number of heterogeneous, independentlyoperating 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: Computer Science 201 or consent of instructor. 6 credits, MS; FSR, Offered in alternate years, Fall-A. Csizmar Dalal
317. 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, Winter-S. Goings
318. 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 2013-2014
319. 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, Not offered in 2013-2014
320. Mobile Application Development Software used to stay on the desktop where you put it. Now, we carry multi-purpose computational devices in our pockets. Mobile computers raise a host of software design challenges, with constrained visual spaces, touch screens, GPS sensors, accelerometers, cellular access, and cameras all in one device. More challenges come from the idea of an "app store," a five-year-old experiment that has changed the way developers and computer users think about software. In the context of a few app development projects, this course will focus on mobile computing's design patterns, user interface principles, software development methodologies, development tools, and cultural impact. Prerequisite: Computer Science 204. 6 credits, FSR, Spring-J. Ondich
321. Parallel and Distributed Computing As multi-core machines become more prevalent, different programming paradigms have emerged for harnessing extra processors for better performance. This course explores parallel computation (programs that run on more than one core) as well as the related problem of
distributed computation (programs that run on more than one machine). In particular, we will explore the two major paradigms for parallel programming, shared-memory multi-threading and message-passing, and the advantages and disadvantages of each. Other possible topics include synchronization mechanisms, debugging concurrent programs, fork/join parallelism, the theory of parallelism and concurrency, parallel algorithms, cloud computing, Map/Reduce, GPU programming, transactional memory, and memory models. Prerequisite:
Computer Science 201. 6 credits, MS; FSR, Not offered in 2013-2014
322. 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, FSR, Winter-D. Liben-Nowell
323. 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 201. 6 credits, MS; FSR, Offered in alternate years, Not offered in 2013-2014
324. 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. Students are strongly encouraged to complete Computer Science 252 and either Computer Science 204 or 257 before starting Computer Science 399. 3 credits, S/CR/NC, ND; NE, Fall—Staff
325. Integrative Exercise Beginning with the prototypes developed in the Senior Seminar, project teams will complete their project and present it to the department. Required of all senior majors. Prerequisite: Computer Science 399. 3 credits, S/NC, ND; NE, Winter-Staff

## CROSS-CULTURAL STUDIES CONCENTRATION (CCST)

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:

AMST 115 Introduction to American Studies: The Immigrant Experience and
CCST 100: Growing Up Cross-Culturally (recommended but not required) and
CCST 275: I'm a Stranger Here Myself and
POSC 170 International Relations and World Politics or POSC 236 Global, National and Human Security or POSC 358 Comparative Social Movements

## Electives:

Three 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.

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, AI, WR1, IS, Fall-S. Cox
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 CCST 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, Not offered in 2013-2014
102. I'm A Stranger Here Myself What do enculturation, tourism, culture shock, "going native," haptics, crosscultural adjustment, and third culture kids have in common? How do intercultural transitions shape identity? What is intercultural competence?This course explores theories about intercultural contact and tests their usefulness by applying them to the analysis of world literature, case studies, and the visual arts, and by employing students' intercultural experiences as evidence. From individualized, self-reflective exercises to community-oriented group endeavors, our activities will promote new intercultural paradigms in the classroom and the wider community. Course designed for off-campus returnees, students who have lived abroad, or who have experienced being outsiders. 6 credits, ND, RAD; SI, IS, Winter-É. Pósfay

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 \& New Zealand (Not offered in 2013-2014)
FREN 235 Francophone Literature of Africa and the Caribbean (Not offered in 20132014)

FREN 395 Francophone Switzerland

## Regional Perspective:

AMST 240 The Midwest and the American Imagination (Not offered in 2013-2014)
ARTH 164 Buddhist Art (Not offered in 2013-2014)
BIOL 210 Global Change Biology
ENGL 238 African Literature in English
FREN 245 Francophone Literature of Africa and the Caribbean
HEBR 221 Israeli Literature in the Middle East
HIST 137 Early Medieval Worlds (Not offered in 2013-2014)
HIST 139 Foundations of Modern Europe (Not offered in 2013-2014)
HIST 140 The Age of Revolutions: Modern Europe, 1789-1914
HIST 141 Europe in the Twentieth Century (Not offered in 2013-2014)
HIST 169 Colonial Latin America 1492-1810 (Not offered in 2013-2014)
HIST 170 Modern Latin America 1810-Present
HIST 180 An Historical Survey of East Africa (Not offered in 2013-2014)
HIST 204 Crusade, Contact and Exchange in the Medieval Mediterranean (Not offered in 2013-2014)
HIST 232 Renaissance Worlds in France and Italy
HIST 233 Cultures of Empire: Byzantium, 710-1453 (Not offered in 2013-2014)
HIST 236 Women's Lives in Pre-Modern Europe (Not offered in 2013-2014)
HIST 259 Women in South Asia: Histories, Narratives and Representation
HIST 260 The Making of the Modern Middle East
HIST 265 Central Asia in the Modern Age
LTAM 300 Issues in Latin American Studies
MUSC 243 Musical Cultures of the Caribbean (Not offered in 2013-2014)
POSC 221 Latin American Politics (Not offered in 2013-2014)
POSC 241 Ethnic Conflict
POSC 255 Post-Modern Political Thought (Not offered in 2013-2014)
POSC 263 European Political Economy
POSC 269 Issues in Postmodern Political Thought
POSC 322 Neoliberalism and the New Left in Latin America*
RELG 150 Religions of South Asia
RELG 155 Religions of Southeast Asia (Not offered in 2013-2014)
RELG 251 Theravada Buddhism (Not offered in 2013-2014)
RELG 253 Tibetan Buddhism (Not offered in 2013-2014)
SOAN 256 Ethnography of Africa (Not offered in 2013-2014)
SOAN 259 Comparative Issues in Native North America
SPAN 207 Exploring Hispanic Culture (Not offered in 2013-2014)
SPAN 242 Introduction to Latin American Literature
SPAN 255 Women Dramatists in Latin America: Staging Conflicts (Not offered in 20132014)

SPAN 260 Forces of Nature
SPAN 321 Murder as a Fine Art: The Detective Novel in Latin America
SPAN 336 Genealogies of the Modern: Turn of the Century Latin America (Not offered in 2013-2014)
Global Issues:
BIOL 210 Global Change Biology
BIOL 212 Australia Program: Biology Field Studies and Research (Not offered in 2013-

BIOL 221 Ecosystem Ecology
BIOL 352 Population Ecology
CHEM 328 Environmental Analysis (Not offered in 2013-2014)
ECON 224 Cambridge Program: The Determinants of Economic Growth and the Modern British Economy
ECON 281 International Finance
ENTS 215 Environmental Ethics
ENTS 244 Biodiversity Conservation and Development
FREN 249 Paris Program: Identity Crossings: France-Morocco
FREN 349 Paris Program: Identity Crossings: France-Morocco
FREN 360 Topics in French Studies: Algeria-France
HIST 360 Muslims and Modernity (Not offered in 2013-2014)
MUSC 111 Classical Music: An Introduction
MUSC 145 Music of Africa with Beginning Karimba Instruction (Not offered in 2013-2014)
MUSC 210 Medieval and Renaissance Music (Not offered in 2013-2014)
MUSC 245 Music of Africa (Not offered in 2013-2014)
POSC 120 Comparative Political Regimes
POSC 255 Post-Modern Political Thought (Not offered in 2013-2014)
POSC 259 Justice Among Nations (Not offered in 2013-2014)
POSC 265 Capitalist Crises, Power, and Policy (Not offered in 2013-2014)
POSC 268 Global Environmental Politics and Policy
POSC 269 Issues in Postmodern Political Thought
POSC 281 Global Society: An Approach to World Politics (Not offered in 2013-2014)
POSC 355 Identity, Culture and Rights*
POSC 358 Comparative Social Movements*
PSYC 358 Cross-Cultural Psychology Seminar in Prague: Psychopathology (Not offered in 2013-2014)
PSYC 384 Psychology of Prejudice
RELG 121 Introduction to Christianity (Not offered in 2013-2014)
SOAN 226 Anthropology of Gender
SOAN 234 Ecology, Economy, and Culture (Not offered in 2013-2014)
SOAN 262 Anthropology of Health and Illness (Not offered in 2013-2014)
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2013-2014)
SPAN 220 Magical Realism in Latin American Narrative (Not offered in 2013-2014)
Ethnic Diversity and Diaspora:
AMST 115 Introduction to American Studies: Placing Identities
AMST 127 Introduction to U.S. Latino/a Studies (Not offered in 2013-2014)
AMST 227 Beyond the Border: Latinos Across America (Not offered in 2013-2014)
EDUC 353 Schooling and Opportunity in American Society (Not offered in 2013-2014)
ENGL 119 Introduction to U.S. Latino/a Literature (Not offered in 2013-2014)
ENGL 235 Asian American Literature
ENGL 258 Contemporary American Playwrights of Color
FREN 243 Topics in Cultural Studies: Cultural Reading of Food (Not offered in 20132014)

HIST 276 The African Diaspora in Latin America (Not offered in 2013-2014)
HIST 322 Civil Rights and Black Power (Not offered in 2013-2014)
HIST 360 Muslims and Modernity (Not offered in 2013-2014)

POSC 355 Identity, Culture and Rights*
PSYC 358 Cross-Cultural Psychology Seminar in Prague: Psychopathology (Not offered in 2013-2014)
PSYC 384 Psychology of Prejudice
RELG 130 Native American Religions (Not offered in 2013-2014)
RELG 243 Native American Religious Freedom (Not offered in 2013-2014)
RELG 271 Religious and Moral Issues of the Holocaust (Not offered in 2013-2014)
SOAN 259 Comparative Issues in Native North America
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2013-2014)
SPAN 350 Recent Trends in Latin American Narrative: Pop Culture and Testimony (Not offered in 2013-2014)

## EAST ASIAN STUDIES CONCENTRATION

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 (Literary/Artistic Analysis, Humanistic Inquiry or Social Inquiry)

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.
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
ARTH 166 Chinese Art and Culture
ARTH 320 Japanese Theater: Visualizing Narrative Across Media (not offered in 20132014)

ARTH 321 Arts of the Chinese Scholars
CHIN 282 Chinese Studies Seminar in Tianjin: Chinese Civilization
HIST 152 History of Early China (not offered in 2013-2014)
HIST 153 History of Modern China (not offered in 2013-2014)
JAPN 240 Literature and Society of Modern Japan in Translation (not offered in 20132014)

RELG 151 Religions in Chinese Culture (not offered in 2013-2014)
RELG 152 Religions in Japanese Culture
Supporting Courses: 24 credits from among the following; courses must be from at least two distribution areas.

ARTH 164 Buddhist Art (not offered in 2013-2014)
ARTH 165 Japanese Art and Culture (not offered in 2013-2014)
ARTH 166 Chinese Art and Culture
ARTH 209 Chinese Painting (not offered in 2013-2014)
ARTH 220 Gender and Genre in the Floating World: Japanese Prints
ARTH 320 Japanese Theater: Visualizing Narrative Across Media (not offered in 2013-
2014)

ARTH 321 Arts of the Chinese Scholar's Studio (not offered in 2013-2014)
ASLN 111 Writing Systems
ASLN 237 Tao of Wisdom in Asian Literature (not offered in 2013-2014)
ASLN 260 Historical Linguistics (not offered in 2013-2014)
ASST 284 Linguistics Seminar: History and Culture of Japan
CHIN 115 The Taoist Way of Health and Longevity, Taichi and Other Forms
CHIN 212 Chinese Studies Seminar in Tianjin: Chinese Culture (not offered in 2013-
CHIN 347 Advanced Reading in Contemporary Chinese Prose: Newspapers (not offered in 2013-2014)

CHIN 348 Advanced Chinese: The Mass Media (not offered in 2013-2014)
CHIN 349 Advanced Chinese: Social Commentary (not offered in 2013-2014)
CHIN 350 Advanced Chinese: Poems and Stories (not offered in 2013-2014)
CHIN 360 Classical Chinese (not offered in 2013-2014)
CHIN 363 Conversation and Composition: The Liberal Arts in Chinese
ECON 240 Microeconomics of Development
HIST 156 History of Modern Korea
HIST 253 Bureaucracy, Law and Religion in East Asia (not offered in 2013-2014)
HIST 254 Colonialism in East Asia
HIST 255 Print Culture and Nationalism in East Asia (not offered in 2013-2014)
HIST 256 History of Urban China
JAPN 230 Topics in Pre-Modern Literature in Translation (not offered in 2013-2014)
JAPN 231 Japanese Cinema in Translation
JAPN 236 Classical Japanese Fiction: The Tale of Genji and Its World in Translation (not offered in 2013-2014)

JAPN 243 The Other in Modern Japanese Literature and Society in Translation (not offered in 2013-2014)

JAPN 344 Advanced Writing: Contemporary Prose (not offered in 2013-2014)
JAPN 345 Advanced Reading in Modern Japanese Literature: The Short Story (not offered in 2013-2014)

JAPN 346 Advanced Readings in Modern Japanese Literature: Poetry and Drama (not offered in 2013-2014)

JAPN 348 Advanced Conversation and Composition (not offered in 2013-2014)
JAPN 349 Advanced Readings in Contemporary Japanese Prose (not offered in 20132014)

JAPN 352 Advanced Japanese Through Manga and Contemporary Materials (not offered in 2013-2014)

LING 285 The Linguistics of the Japanese Writing System
LING 286 The Structure of Japanese
MUSC 182 Chinese Musical Instruments
MUSC 182J Chinese Musical Instruments (Juried)
MUSC 282 Chinese Musical Instruments
MUSC 282J Chinese Musical Instruments (Juried)
POSC 239 The Diplomat's Craft: Three Case Studies
RELG 153 Introduction to Buddhism
RELG 254 Zen Buddhism (not offered in 2013-2014)
RELG 255 Social Engagement in Asian Religions
RELG 257 Shar\ía
RELG 350 Emptiness (not offered in 2013-2014)
Capstone Course: For 2013-2014, consult with the concentration director

## ECONOMICS (ECON)

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 (329, 330, and 331), 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. Economics majors planning to take a senior seminar in the fall of their senior year with the intention of writing a paper as their integrative exercise in a subsequent term must complete Economics 330 and Economics 331 by the end of their junior year.

Mathematics 111 or its equivalent and Mathematics 215 (or 275 ) are prerequisites for Economics 329, Mathematics 111 is a prerequisite for Economics 330 and Economics 330 is a prerequisite for Economics 331. 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

110. 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-Staff
111. 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-Staff
112. Cambridge Program: Contemporary British Economy This course focuses on the theoretical and policy debates in British economics since the 1930's and the development of the structure of the British economy and institutions during that period. Prerequisite: Economics 110 and 111. 6 credits, SS; SI, QRE, Summer-NonCarleton Faculty
113. Cambridge Program: The Industrial Revolution in Britain This course studies the Industrial Revolution in Great Britain and examines a number of scholarly debates over its scope, size, and significance, with particular emphasis on the development of power and the wool, cotton, textile, iron, pottery, shipping, and coal mining industries and urban development in London. Site visits to locations of historical significance are an important component of this course. Prerequisite: Economics 110 and 111. 6 credits, SS; SI, Summer-M.
Kanazawa
114. Cambridge Program: J. M. Keynes and his Present-Day Legacy This course examines the writings of J . M. Keynes and his economic legacy. In addition to examining the life and economic ideas of Keynes, students will examine the current debate over their effectiveness in addressing the recent economic downturn both in the United States and Britain. 2 credits, S/CR/NC, SS; SI, Summer-M. Kanazawa
115. Cambridge Program: The Determinants of Economic Growth and the Modern British Economy This course examines the long term growth experience of the British economy from the Industrial Revolution to the present. Starting from an initial position of undisputed world industrial dominance thanks to the Industrial Revolution, Britain has since experienced a long-term decline in its economic fortunes. The British experience thus provides fascinating insights into the causes and determinants of the rise and decline of national economies. A key theme of the course is the importance of history and the interplay between governing institutions and the economic activity that occurs within specific institutional settings. Prerequisite: Economics 110 and 111. 4 credits, SS; SI, IS, QRE, Summer-M. Kanazawa
116. 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 2013-2014
117. 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
118. 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, Winter-F. Bhuiyan
119. 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, Not offered in 2013-2014
120. 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, Not offered in 2013-2014
121. 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 2013-2014
122. Analysis of Microeconomic Development Models This course is the second part of a two-term course sequence beginning with Economics 240. This course will focus on critically analyzing the appropriateness of modern microeconomic development models in the context of Bangladesh. Students exposed to various on-site visits and lectures in Bangladesh during the winter break will be required to research, write and present their views on the reliability of different model assumptions and implications they studied in Economics 240. Prerequisite: Economics 110, 111, and 240. 6 credits, SS, WR; SI, WR2, IS, QRE, Not offered in 2013-2014
123. 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 2013-2014
124. Economics of Welfare This course presents economic theory on how society as a whole ranks and chooses between different alternatives. It delves into the realm of normative economics analyzing objectives society may want to pursue, mechanisms designed to reach those objectives, and the resulting welfare of individuals affected by the choices made. The theoretical tools discussed will be used to study different mechanisms of voting, redistributing income, government intervention, auctions, and trade. Among other things, students will be exposed to the Pareto criterion, Arrow's impossibility theorem, the Vickery-Clarke-Grove mechanism, the Coase theorem, utilitarianism, Rawlsian ethics, and welfare theorems. Prerequisite: Economics 110 and 111. 6 credits, SS; SI, IS, QRE, Not offered in 2013-2014
125. 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, Spring-B. Wambheim
126. 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 2013-2014
127. Entrepreneurship, Innovation, and Economic Performance Joseph Schumpeter, in lamenting the absence of an accepted theory of entrepreneurship, observed that this gap in economics is much like having Hamlet performed with the Prince of Denmark absent. Much has changed since Schumpeter leveled this criticism. Economics has embraced the contributions of entrepreneurs and provided theoretical models explaining their actions. This course explores the foundations of a microeconomic theory of entrepreneurship, investigating the role of entrepreneurs (and intrapreneurs within large organizations) as agents for change. Case studies of business development provide practical illustrations of ways in which entrepreneurs operate and how their efforts contribute to economic progress. Prerequisite: Economics 111. 6 credits, SI, Winter-B. Dalgaard
128. Health Care Economics This course will focus on the economics of medical care and how health care markets and systems work. We will consider both private health insurance markets and publicly provided social health insurance. The changes which demography, technology and the Affordable Health Care Act are bringing to health care delivery will be examined. Some time will be devoted to understanding the health care systems in other countries. This is a discussion course. Prerequisite: Economics 110 and 111. 6 credits, SI, Spring-M. Paas
129. 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. Prerequisite: Economics 110 and 111. 6 credits, SS; SI, QRE, Fall-L. Feiler
130. 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. Prerequisite: Economics 110 and 111. 6 credits, SS; SI, QRE, Spring-L. Feiler
131. 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. Prerequisite: Economics 110 and 111. 6 credits, SS; SI, QRE, Winter-L. Feiler
132. 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, Not offered in 2013-2014
133. 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 2013-2014
134. 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
135. Economics, Property and Institutions in Natural Resouces This course examines the economic, historical, legal and institutional roots of the present-day environmental crisis, with the main, but not exclusive, focus on the United States. Topics covered include land and timber policy, minerals extraction, grazing rights, fisheries management, energy use and production, agriculture, wildlife management, endangered species protection, and rain forest preservation. Prerequisite: Economics 110 and 111.6 credits, SS, WR; SI, WR2, QRE, Not offered in 2013-2014
136. 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, Fall-M. Kanazawa
137. 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
138. 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, WR; SI, WR2, QRE, Spring-J. Bourne
139. Money and Banking This course examines the role of money and monetary institutions in determination of income, employment, and prices in the domestic and world economies. It also examines the role of commercial banking and financial markets in a market-based economy. Prerequisite: Economics 110 and 111. 6 credits, SS; SI, QRE, Fall-B. Wambheim
140. An Economic History of Financial Crises The course provides an historical perspective on financial bubbles and crashes and reviews the main theories of financial crises. The course will look at the long history of financial crises to highlight recurring themes and to try to determine, among other things, what went wrong, what elements precede most crises, and which responses were effective. In addition, the course will provide an overview of the business cycle theories of Mill, Marx, Keynes, and other economists. Prerequisite: Economics 110 and 111.6 credits, SS; SI, Winter-B. Wambheim
141. 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, Spring-N. Grawe
142. International Trade A study of international trade theories and their policy implications. Classical and neoclassical 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, SS; SI, QRE, Winter—P.

## Seneviratne

281. 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, Spring-P. Seneviratne
282. 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 real-world 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 theorybuilding and statistical techniques for data analysis. Prerequisite: Economics 110 and 111. 6 credits, SS; SI, QRE, Not offered in 2013-2014
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 twovariable and multiple regression, interval estimation and hypothesis testing, discrete and continuous structural change, parameter restrictions, model construction, heteroscedasticity, autocorrelation, and multicollinerarity. Prerequisite: Mathematics 111 (or it's equivalent) and either Mathematics 215 or 275 and Economics 110 and 111. 6 credits, SS; SI, QRE, Fall, Spring-M. Kanazawa, A. Swoboda
284. 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. Bourne
285. 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-N. Grawe
286. Advanced Topics in Macroeconomic Theory Detailed analyses of aggregate consumption, investment, money-holding and labor market behavior with special attention to each area's micro-foundations and to the empirical verification of theory. These analyses are related to the determination of national income, employment and the price level; to economic growth and business fluctuations; and to optimal public policy. Prerequisite: Economics 329 or concurrent enrollment in Economics 329, 330 or 331. . 6 credits, SS, WR; SI, WR2, IS, QRE, Fall-N. Grawe
287. 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. Prerequisite: Economics 329 or concurrent enrollment in Economics 329, 330, or 331.6 credits, SS, WR; SI, WR2, IS, QRE, Fall-J. Bourne
288. Integrative Exercise 6 credits, S/NC, ND, Winter, Spring-J. Bourne, L. Feiler, N. Grawe

## EDUCATIONAL STUDIES (EDUC)

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. 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 interregistration 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

100. Will This Be on the Test? Standardized Testing and American Education How and why have standardized tests become so central to our educational system? This seminar will explore the following topics, among others--the invention of standardized tests and the growth of the testing industry; psychometrics (the
science of mental measurement); and the controversies surrounding the use of standardized tests, including charges that they are culturally biased and do not positively contribute to student learning. Our analyses will be informed by a close examination of authentic testing materials, ranging from intelligence tests to the SAT. 6 credits, Al, WR1, Fall-J. Snyder
101. 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, SS, WR; SI, WR2, IDS, Fall, Winter, Spring-A. Chikkatur, J. Snyder
102. 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, Not offered in 2013-2014
103. 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
104. 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
105. Developing Education Policy for Access and 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 20132014
106. 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, Not offered in 2013-2014
107. Fixing Schools: Politics and Policy in American Education This course will survey current approaches to educational change. Students will explore the current systems and structures that constitute the policy framework, scrutinize the assumptions and ideological underpinnings of different political camps, and examine the dynamic interactions between and among those shaping American education. Additionally, they will look at various reform efforts and models, considering their use in the effort to transform schools. Prerequisite: Education 110 or by permission of instructor. 6 credits, SS; SI, Spring-J. Snyder
108. Teaching Exceptional Students This course considers the identification, planning, non-discriminatory 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
109. Educational Research: Cultural Capital and Carleton In our data-driven world, individuals who are able to critically read and produce quality research are in powerful positions to effect educational change. What changes have the greatest promise? Once change is implemented, does it actually live up to that promise? This
course will provide an introductory experience to being an educational researcher. Students will distinguish cases in which qualitative or quantitative research methods are warranted; examine the literature and identify gaps; and prepare a research plan. The topic of study will be the influence of cultural capital in the ways Carleton students study or choose courses of study. Prerequisite: One Educational Studies course or permission of the instructor. 6 credits, SS, RAD; FSR, IDS, QRE, Winter-A. Nixon
110. 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. 6 credits, $S S, R A D$; SI, IDS, Spring-A.
Chikkatur
111. 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, Spring-D. Appleman
112. 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, SI, Not offered in 2013-2014
113. 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, Not offered in 2013-2014
114. 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, SS; SI, IDS, QRE, Not offered in 2013-2014
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, $S / C R / N C$, ND; NE, Fall—D. Appleman
115. 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, Not offered in 2013-2014
116. 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, Not offered in 2013-2014
117. 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
118. 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. 3 credits, ND; NE, Spring-C. Oehmke
119. 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-A.
Chikkatur

## EDUCATIONAL STUDIES CONCENTRATION

The Educational Studies Concentration provides an interdisciplinary approach to the study of education as an individual pursuit, an institutional venture, and a societal imperative. The concentration aims to develop thoughtful, skillful and imaginative students of the psychology, social and cultural history, and politics of education. Students will pursue the study of education as a liberal art, one that both 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 education as a cornerstone of democracy.

## 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. Students interested in the concentration are advised to begin their study during their sophomore year.

Core Courses:
EDUC 110 Introduction to Educational Studies
EDUC 234 Educational Psychology
EDUC 238 Multicultural Education
Supporting Courses: Select one course from each of the three clusters; these courses must be from three different departments. The list below is not an exhaustive one. Please check the appropriate department pages for course descriptions and prerequisites and when courses are offered. 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
CGSC/PSYC 232 Cognitive Processes
CGSC 236 Thinking, Reasoning and Decision Making (not offered in 2013-2014)
CGSC 380 Seminar in Developmental Psychology: Cognitive Development During the Preschool Years (not offered in 2013-2014)

CGSC 385 Cognitive Development in Middle Childhood (not offered in 2013-2014)
CGSC 386 Adolescent Cognitive Development: Developing an Identity and Life Plans
EDUC 344 Teenage Wasteland: Adolescence and the American High School
PSYC 210 Psychology of Learning
PSYC 250 Developmental Psychology
PSYC 258 Social Cognition
PSYC 366 Cognitive Neuroscience (not offered in 2013-2014)
Cluster II Social and Cultural Context of Schooling in a Diverse Society
AMST 115 Introduction to American Studies: The Immigrant Experience

AMST 127 Introduction to U.S. Latino/a Studies (not offered in 2013-2014)
EDUC 340 Race, Immigration and Urban Schools
HIST 125 African American History I
HIST 126 African American History II
POSC 122 Politics in America: Liberty and Equality
POSC 306 How Race Matters in American Politics* (not offered in 2013-2014)
PSYC 384 Psychology of Prejudice
RELG 140 Religion and American Culture
SOAN 220 Class, Power and Inequality in America (not offered in 2013-2014)
SOAN 272 Race and Ethnicity in the United States
Cluster III Public Policy and Educational Reform
ECON 245 Economics of Inequality (not offered in 2013-2014)
ECON 270 Economics of the Public Sector (not offered in 2013-2014)
EDUC 225 Issues in Urban Education (not offered in 2013-2014)
EDUC 245 History of American School Reform (not offered in 2013-2014)
EDUC 353 Schooling and Opportunity in American Society (not offered in 2013-2014)
POSC 218 Schools, Scholarship and Policy in the United States (not offered in 2013-
2014)

SOAN 215 Social Welfare (not offered in 2013-2014)
Senior Seminar: EDUC 395 Senior Seminar

## ENGLISH (ENGL)

## General Information

Courses numbered from 100 to 294 (introductory courses) are designed for nonmajors 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-level) require prior completion of one 6-credit English course; admission to upper-level courses in creative writing (300-level) 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:

1. at least 6 credits must be taken in each of the following traditions:
a. British literature
b. United States literature
c. English literatures other than British and United States
2. at least 24 credits must be in courses numbered 300-395
3. up to 6 credits may be in literature other than English in the original or translation
4. up to 12 credits may be in creative writing
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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 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 fictionwriters Jane Hamilton, Ann Beattie, Maxine Hong Kingston, Marilynne Robinson, Jonis Agee, Paul Auster, and Siri Hustvedt.

## 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. Cannot be used for the Writing Requirement. 6 credits, S/CR/NC, ND; NE, Summer-Staff
100. 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 "l" 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
101. "His Dark Materials": Milton, Shelley, Pullman We will read Mary Shelley's Frankenstein and Philip Pullman's His Dark Materials as responses to and radical revisions of Milton's Paradise Lost. 6 credits, AI, WR1, Fall-C. Walker
102. Autobiography How do we, how should we, respond to the autobiographical writings of public figures, private citizens, academics, or movie stars? Are there common strategies employed in these acts and processes of self-mapping? Does accuracy matter to us if we happen to find these textual self-portraits appealing? We will keep questions like these in mind as we read, discuss, and write about autobiographies and memoirs by Maya Angelou, Sidney Poitier, James McBride, Barack Obama, bell hooks, and John Hope Franklin. 6 credits, AI, WR1, Fall-K. Owusu
103. Woodstock Nation "If you remember the sixties, you weren't there." We will test the truth of that popular adage by exploring the American counterculture of the 1960s, particularly the turbulent period of the late sixties. Using examples from literature, music and film, we will examine the hope and idealism, the violence, the wacky creativity and the social mores of this seminal decade in American culture. Authors will include Jack Kerouac, Thomas Pynchon, Joan Didion and James Baldwin. Film showings will include The Graduate and Easy Rider. Musicians discussed will include the Beatles, Bob Dylan, Jimi Hendrix and Janis Joplin. 6 credits, Al, WR1, Fall-M. Kowalewski
104. The Art of Persuasion Rhetoric's all around us: in political manifestos and legal pleadings; in professions of love and adverts for dog food. We use it whenever we urge someone to believe or do what we say. But how well do we understand the foundations and protocols of the art that teaches us "to see the available means of persuasion?" In this class we'll study the origins and theory of rhetoric (via Aristotle), examine exemplary instances (from Pericles to Obama), and consider the charges (via Plato) that it's all just lies and trickery, while learning how to compose persuasive academic papers and presentations. 6 credits, AI, WR1, Fall-T. Raylor
105. 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-N. Cho, C. Rutz
106. 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 2013-2014
107. 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 2013-2014
108. 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, Fall-K. Owusu
109. 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, AL, WR; LA, WR2, Not offered in 2013-2014
110. 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, AL, WR; LA, WR2, IDS, Spring-K.
Owusu
111. 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, AL, WR; LA, WR2, Winter-A. Estill
112. 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, AL, WR, RAD; LA, WR2, IDS, Not offered in 2013-2014
113. 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, AL, WR; LA, WR2, Not offered in 2013-2014
114. 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 nonfictional? 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, $A L$, WR; LA, WR2, Not offered in 2013-2014
115. 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, WinterC. Walker
116. Reading Fiction Selected texts to be read in this course include those by Daniel Defoe, Thomas Hardy, Charles Johnson, J.M. Coetzee, Zadie Smith, and Sherman Alexie. We will pay close attention to the language of fiction, to the nature of narrative, and to narrative traditions in our ten-week journey from the world of Defoe's Moll Flanders to that of Alexie's Part-Time Indian. 6 credits, WR; LA, WR2, Spring-K. Owusu
117. 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, Not offered in 2013-2014
118. 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, AL, WR; ARP, WR2, Fall, Winter, Spring-S. Jaret McKinstry, G. Hewett, G. Smith
119. 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, Not offered in 2013-2014
120. Twelfth Night: A Project Course This interdisciplinary course will explore one of Shakespeare's greatest and most complex works. We will investigate Twelfth Night's historical, political, religious, and theatrical contexts by reading and researching works by Montaigne, Jonson, Marston, Dekker, Rich, and Stubbs, as well as early modern documents on everything from puritanism to sexuality to music to clowning. How should an understanding of the world that produced this play inform a modern production of it? How can performance offer
interpretive arguments about the play's meanings? A vital part of the course will be students' active participation in a full-scale Carleton Players production of the play. Corequisite: Theater Arts 1906 credits, ARP, Fall-P.

## Hecker, R. Weiner

210. From Chaucer to Milton: Early 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, $A L, W R ; L A$, WR2, Spring-T. Raylor
211. Neoclassic, Romantic, and Victorian Literature Readings in eighteenth and nineteenth-century British literature. 6 credits, $A L$, WR; LA, WR2, Winter-J. Leiman
212. Nineteenth-Century American Literature A survey of the major forms and voices of nineteenth-century 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, AL, WR; LA, WR2, Winter-N. Cho
213. 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, WR; LA, Not offered in 2013-2014
214. 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, WR; LA, Not offered in 20132014
215. 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, AL, WR; LA, WR2, Winter-M. Kowalewski
216. Milton Radical, heretic, and revolutionary, John Milton wrote the most influential, and perhaps the greatest, poem in the English language. We will read the major poems (Lycidas, the sonnets, Paradise Lost, Samson Agonistes), a selection of the prose, and will attend to Milton's historical context, to the critical arguments over his work, and to his impact on literature and the other arts. 6 credits, $A L, W R ; L A, W R 2$, Winter-T. Raylor
217. A Novel Education Samuel Johnson declared novels to be "written chiefly to the young, the ignorant, and the idle, to whom they serve as lectures of conduct, and introductions into life." This course will explore what kinds of education the novel offered its readers during a time when fiction was considered a source of valuable lessons and a vehicle for corruption. We will read a selection of eighteenth- and nineteenth-century novels, considering how they engage with contemporary educational theories, notions of male and female conduct, and concerns about the didactic and imaginative possibilities of fiction. Authors include Richardson, Lennox, Austen, Edgeworth, and Dickens. 6 credits, AL, WR; LA, WR2, Offered in alternate years, Fall-J. Leiman
218. 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, AL, WR; LA, WR2, Spring-J. Leiman
219. 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, T. Raylor
220. 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-C. Walker
221. American Transcendentalism "The question of the times," Emerson writes, "resolve[s] itself into a practical question of the conduct of life. How shall I live?" An outgrowth of liberal religious culture in and around

Boston in the decades before the Civil War, the U.S. Transcendentalist movement remains one of most debated but influential intellectual movements in American cultural history. This course will offer in-depth exposure to the experiments in thought, writing, and conduct for which the movement is known, and to its still unsettled legacy on such topics as Revolution, slavery, religion, nature, and friendship. 6 credits, AL, WR; LA, WR2, Offered in alternate years, Not offered in 2013-2014
224. Children's Literature A literary investigation of children's literature with close attention to the particular aesthetic issues that follow from the genre's mixing of delight and didacticism, whimsy and pedagogy. We will trace the nineteenth and twentieth-century rise of works written for a child audience back to origins in the power struggles and wish fulfillment of oral tradition tales, the Enlightenment "fairytale," and the Romantic-era "invention of childhood." Works by the Grimms, Straparola, Basile, Perrault, d'Aulnoy, Bettelheim, Wordsworth, Burnett, Kipling, E.B. White, and Sendak. 6 credits, AL, WR; LA, WR2, Not offered in 2013-2014
228. The American Novel: Revolution to Romance (1790-1850) We will trace the cultural history of the U.S. as a democratic republic from the Revolution to the eve of the Civil War through the hopeful and anxious visions of eighteenth- and ninteenth-century American novelists. Topics will include the political meanings of the sentimental and the Gothic, contested claims about North American space, the "vanishing" Indian, the delayed confrontation with slavery, the issue of women's rights, and the cultural work of the "romance." Works by Hannah Foster, Brockden Brown, Cooper, Hawthorne, Fanny Fern, and Melville. 6 credits, AL, WR; LA, WR2, Offered in alternate years, Not offered in 2013-2014
229. The American Novel: Romance to Realism (1850 to 1910) Post-Civil War writers refashioned the cultural work of fiction to express the new taste for realism and the even more chastened mode of naturalism. The novels of this period have a documentary feel, as though charged with representing and re-envisioning the drama of real American lives in a disenchanted, industrialized, and rapidly consolidating world. Readings from Howells, James, Crane, Jewett, Gilman, Dreiser, Chesnutt, and Wharton. 6 credits, AL, WR; LA, WR2, Offered in alternate years, Not offered in 2013-2014
234. Literature of the American South Masterpieces of the "Southern Renaissance" of the early and midtwentieth 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, AL, WR, RAD; LA, WR2, IDS, Offered in alternate years, Fall-E. McKinsey
235. 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, AL, WR, RAD; LA, WR2, IDS, Spring-N. Cho
236. 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, AL, WR; LA, WR2, Fall-M. Kowalewski
238. 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, Winter-K. Owusu
243. 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 2013-2014
244. 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
245. 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 60 years with particular emphasis on urban thrillers and social dramas. 6 credits, AL, WR, RAD; LA, WR2, IS, Offered in alternate years, Spring-A. Chakladar
247. 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 area. We will explore how writers such as Twain, Cather, Stegner and Cormac McCarthy have dealt with the geographical diversity and multiethnic 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, Not offered in 2013-2014
248. 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
249. Irish Literature We will read and discuss modern Irish poetry, fiction, and drama in the context of Irish politics and culture. Readings will include works by W. B. Yeats, James Joyce, Patrick Kavanaugh, Samuel Beckett, Brian Friel, Edna O'Brien, Seamus Heaney, Eavan Boland, and Ciaran Carson, among others. 6 credits, AL, WR; LA, WR2, Winter-C. Walker
250. 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, AL, WR, RAD; LA, WR2, IS, Not offered in 2013-2014
251. 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, $A L, W R$, RAD; LA, WR2, IS, Offered in alternate years, Not offered in 2013-2014
252. 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, $A L$, WR, RAD; LA, WR2, IS, Spring-A. Chakladar
257. Irish Literature and Culture in Ireland: Contemporary Irish Literature In this course students will read contemporary Irish literature and meet with writers. Students will learn how to write short book reviews and how to interview an author. The goal of the course is for student writers to become familiar with the rich, unique world of Irish letters today, and more generally, to understand how a community of writers works. 6 credits, $A L, W R$, RAD; LA, WR2, IS, Summer-G. Hewett
258. 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 OffOff 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, $A L, W R, R A D ;$ LA, WR2, IS, Winter-N. Cho
260. Irish Literature and Culture in Ireland: Creative Writing in Ireland Students will be asked to do journal writing covering their experiences of place, people, history, legend, contemporary events and conflicts, etc.--out of which they will produce a portfolio of short prose fiction, poetry, or creative nonfiction (a hybrid of personal
essay and expository writing). The goal of this course is to synthesize experience into creative writing and develop proficiency in one of the three genres. 6 credits, $A L, W R, R A D ; A R P, W R 2$, IS, Summer-G. Hewett
270. 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/CR/NC, AL, WR; ARP, WR2, Fall, Winter-G. Smith
271. 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: one prior 6-credit English course. 6 credits, $A L, W R ; A R P$, WR2, Winter-G. Hewett
272. Truth vs. Power: A Journey in Journalism In this workshop-style class in journalistic storytelling, the classroom becomes a newsroom and students become working journalists reporting on Carleton and Northfield events as well as broader social issues, personalities, and trends of their choosing. Working in a multimedia lab, students will create and publish their stories online in a variety of digital platforms and styles. Guided by the journalistic values of truthfulness, fairness, and serving the public interest, students in this class may choose stories of any locale and scale and work in any online medium they choose--from blogging and still photography to videos, podcasts, and infographics. 6 credits, $A L, W R ; L A, W R 2$, Winter-D. McGill
273. Writing Memoir This writing workshop allows students to explore the craft of memoir through intensive writing, critique, and revision in order to create their own memoir. To develop their skills, students will read and discuss memoirs in varied forms (including visual arts), and consider the competing demands of truth, narrative, fiction, and non-fiction in this rich and complex genre. Prerequisite: One prior 6-credit English course or permission of the instructor. 6 credits, $S / C R / N C, A R P$, WR2, Spring-S. Jaret McKinstry
274. Irish Literature and Culture in Ireland: The History and Culture of Ireland through Literature Through selected readings, discussion, and lecture, this interdisciplinary course will provide the necessary intellectual foundation and context for understanding Ireland past and present. The goal of this course is to provide a comprehensive introduction to Ireland. 6 credits, $A L, R A D$; LA, IS, Summer-G. Hewett
275. Rhetoric and Self-presentation Given that $75 \%$ of Carleton graduates enroll in graduate or professional school within five years of graduation, today's undergraduates can expect to be required to present themselves, their personal histories, their ideas, and their career goals in writing for various prestigious audiences. In this course, we will examine the rhetoric of self-presentation in contexts such as personal statements, fellowship applications, and research proposals. Students should expect frequent peer workshops and extensive revision toward polished, formally written products. Prerequisite: Sophomore standing or higher. 6 credits, ND, WR; NE, WR2, QRE, Fall-C. Rutz
278. English Theater and Literature in England: Shakespeare's England This course concentrates on the relationship between Shakespeare's works, the world in which he lived, and the vitality of performance. Visiting Shakespeare-related sites in Stratford-upon-Avon, London, and elsewhere, we will explore England through the lens of Shakespeare's plays and the plays through the lens of Renaissance England. The capstone project for the class will be the collaborative creation of a modern version of a Renaissance commonplace book. 6 credits, AL, WR; LA, WR2, IS, Winter-P. Hecker
280. Crafts of Writing: Creative Non-Fiction This course explores the translation from event to effective writing through a variety of creative non-fiction forms, including memoir, journalism, and personal essay. Discussion of each participant's writing is the central mode of instruction, supplemented by examples from published writers, current magazines and newspapers, and essays on the creative process. Each student will create a portfolio of their work. Prerequisite: One prior 6-credit English course . 6 credits, $A L$; ARP, WR2, Spring-D. Cass
282. English Theater and Literature in England: London Theater Students will attend productions of classical and contemporary plays in London and perhaps 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 may include actors, critics, and directors. Students will keep a theater journal and develop several entries into full reviews of plays. 6 credits, $A L ; L A$, Winter-P. Hecker
295. 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, Fall, Spring-A. Chakladar, S. Jaret McKinstry
309. 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 "self-fashioning" 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, $A L, W R ; L A, W R 2$, Not offered in 2013-2014
310. 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 English 244. 6 credits, AL, WR; LA, WR2, Spring-P. Hecker
313. Major Works of the English Renaissance: The Faerie Queene A study of Spenser's romance epic. 3 credits, AL, WR; LA, WR2, Not offered in 2013-2014
314. Major Works of the English Renaissance: Paradise Lost An examination of Milton's masterwork. 3 credits, AL, WR; LA, WR2, Not offered in 2013-2014
319. 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, AL, WR; LA, WR2, Winter-J. Leiman
323. 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 course in English. 6 credits, AL, WR; LA, WR2, Spring-C. Walker
327. 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, $A L$, WR; LA, WR2, Winter-S. Jaret McKinstry
328. Victorian Poetry Victorian poets are prolific, challenging, inventive, and deeply engaged with the intersection of words and visual images in poetry, painting, and photography. We will read works by Alfred Tennyson, Robert Browning, Oscar Wilde, Matthew Arnold, Dante Rossetti, Christina Rossetti, Charles Dodgson (Lewis Carroll), Gerard Manley Hopkins, and others. We will examine Pre-Raphaelite painting and poetry, and collaborate with Linda Rossi's photography students to create Victorian photographs that depict Victorian poets and poems, which will be exhibited at the end of the term. 6 credits, AL, WR; LA, WR2, Offered in alternate years, Not offered in 2013-2014
329. The City in American Literature How do American authors "write the city"? The city as both material reality and metaphor has fueled the imagination of diverse novelists, poets, and playwrights, through tales of fallen women and con men, immigrant dreams, and visions of apocalypse. After studying the realistic tradition of urban fiction at the turn of the twentieth century, we will turn to modern and contemporary re-imaginings of the city, with a focus on Chicago, New York and Los Angeles. Selected films, photographs, and historical sources will supplement our investigations of how writers face the challenge of representing urban worlds. Prerequisite: One Foundations course and one other 6 -credit English course. Or by permission of the instructor. 6 credits, $A L$,
332. 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 2013-2014
335. England in India/India in England This class will begin by exploring the representation of India in the colonial British imagination and segue into the representation of Britain by contemporary South Asian immigrant writers. We will examine the ways in which British and Indian identities are staged, contested and constructed in both the colonial and postcolonial period. Primary texts will include novels by Kipling, Forster, Kureishi and Kunzru; we will also read a range of postcolonial theory and watch related films and television shows. Prerequisite: One Foundations course and one other 6-credit English course. 6 credits, $A L, W R, R A D ; L A, W R 2$, IS, Offered in alternate years, Fall-A. Chakladar
337. 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 2013-2014
350. 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 6-credit English course. 6 credits, AL, WR, RAD; LA, WR2, IS, Not offered in 2013-2014
352. Toni Morrison: Novelist Morrison exposes the limitations of the language of fiction, but refuses to be constrained by them. Her quirky, inimitable, and invariably memorable characters are fully committed to the protocols of the narratives that define them. She is fearless in her choice of subject matter and boundless in her thematic range. And the novelistic site becomes a stage for Morrison's virtuoso performances. It is to her wellcrafted novels that we turn our attention in this course. Prerequisite: One Foundations course and one other 6credit English course, or by permission of the instructor. 6 credits, AL, WR; LA, WR2, IDS, Not offered in 20132014
362. 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, AL, WR; LA, WR2, Offered in alternate years, Fall-S. Jaret

## McKinstry

370. Advanced Fiction Workshop An advanced course in the writing of fiction. Students will write three to 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/CR/NC, AL, WR; ARP, WR2, Spring-G. Smith
371. 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, Spring-G. Hewett
372. 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, Not offered in 2013-2014
373. Nabokov We will put on our explorer's gear, make sure our dues are paid up to the Society for the Propagation of the Irreal, and venture into the magical worlds of Vladimir Nabokov, the greatest novelist of the second half of the twentieth-century (the Chair will entertain objections only from Señor Garcia Marquez). We will lovingly pet the fauna of the Russian novels, inhale the exotic flora of the American novels, and fly from Terra to Antiterra where accommodations for fifteen intrepid souls have been booked at The Enchanted Hunters. 6 credits, AL, WR; LA, WR2, Fall-G. Smith
374. Yeats and Heaney "How should a poet properly live and write? What is his relationship to be to his own voice, his own place, his literary heritage, and his contemporary world?"--Heaney. We will read the major works and literary criticism of the two great twentieth-century Irish poets W. B. Yeats and Seamus Heaney, studying their art in relation to their place and time. Prerequisite: English 295 and one 300 -level course, or by permission of the instructor. 6 credits, LA, WR2, Spring-C. Walker
375. 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/NC, ND, Winter, Spring-Staff

## ENVIRONMENTAL STUDIES (ENST)

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 66 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 63 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
GEOL 110 Introduction to Geology
GEOL 115 Climate Change in Geology (Not offered in 2013-2014)
GEOL 120 Introduction to Environmental Geology
PHYS 152 Introduction to Physics: Environmental Physics
and one of its prerequisites (Physics 131, 132, 141 or 142)II. Research Design and
Methods (3 credits)
ENTS 232 Research Design and Methods
III.Quantitative Methods ( 6 credits): Pick either of the following:

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

BIOL 210 Global Change Biology
ENTS 271 Environmental Economics and Policy
HIST 205 American Environmental History
V. 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 nonscience 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 (Not offered in 2013-2014)
BIOL 344 Plant Development (Not offered in 2013-2014)
BIOL 374 Seminar: Grassland Ecology (Not offered in 2013-2014)
ENTS 260 Comparative Agroecology
ENTS 265 Modeling Environmental Systems (Not offered in 2013-2014)
ENTS 287 Climate Science
ENTS 288 Abrupt Climate Change (Not offered in 2013-2014)
GEOL 258 Geology of Soils (Not offered in 2013-2014)
GEOL 340 Hydrology (Not offered in 2013-2014)
(ii) Society, Culture and Policy: Take any two of the following:

CLAS 222 Nature and the Environment in the Ancient World (Not offered in 2013-2014)
ECON 268 Economics of Cost Benefit Analysis (Not offered in 2013-2014)
ECON 271 Economics of Natural Resources and the Environment
ECON 272 Economics, Property and Institutions in Natural Resouces (Not offered in 2013-2014)
ECON 273 Water and Western Economic Development
ECON 275 Law and Economics

ENTS 200 Food and Agriculture (Not offered in 2013-2014)
ENTS 215 Environmental Ethics
ENTS 247 Agroforestry Systems: Local and Global Perspectives (Not offered in 20132014)

ENTS 301 Science and Society
ENTS 310 Topics in Environmental Law and Policy
ENTS 372 Coffee Ecologies and Livelihoods
HIST 308 American Cities and Nature (Not offered in 2013-2014)
PHIL 243 Animal Ethics: The Moral Status of Animals
POSC 212 Environmental Justice (Not offered in 2013-2014)
POSC 222 The Politics of Food: Producers, Consumers and Citizenship
POSC 223 Food Justice
POSC 268 Global Environmental Politics and Policy
POSC 333 Global Social Changes and Sustainability* (Not offered in 2013-2014)
SOAN 233 Anthropology of Food
(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 2013-2014)
BIOL 252 Environmental Animal Physiology
BIOL 350 Evolution
BIOL 352 Population Ecology
BIOL 371 Seminar on Human Dominated Ecosystems (Not offered in 2013-2014)
BIOL 374 Seminar: Grassland Ecology (Not offered in 2013-2014)
BIOL 375 Natural History of Minnesota (Not offered in 2013-2014)
ENTS 254 Topics in Landscape Ecology
ENTS 262 Materials Science, Energy, and the Environment (Not offered in 2013-2014)
ENTS 265 Modeling Environmental Systems (Not offered in 2013-2014)
ENTS 272 Remote Sensing of the Environment
ENTS 285 Tanzania and Ethiopia Program: Wildlife Conservation and Livelihoods (Not offered in 2013-2014)
ENTS 287 Climate Science
ENTS 288 Abrupt Climate Change (Not offered in 2013-2014)
(ii) Society, Culture and Policy: Take any two of the following:

ECON 240 Microeconomics of Development
ECON 243 Economic Demography (Not offered in 2013-2014)
ECON 268 Economics of Cost Benefit Analysis (Not offered in 2013-2014)
ECON 271 Economics of Natural Resources and the Environment
ECON 272 Economics, Property and Institutions in Natural Resouces (Not offered in 2013-2014)
ECON 275 Law and Economics
ENGL 236 American Nature Writing
ENTS 200 Food and Agriculture (Not offered in 2013-2014)
ENTS 215 Environmental Ethics
ENTS 244 Biodiversity Conservation and Development
ENTS 247 Agroforestry Systems: Local and Global Perspectives (Not offered in 20132014)

ENTS 275 Urban Ecology

ENTS 284 Tanzania Program: Cultural Studies (Not offered in 2013-2014)
ENTS 301 Science and Society
ENTS 310 Topics in Environmental Law and Policy
HIST 227 History of the American West
HIST 306 American Wilderness
HIST 307 Wilderness Field Studies: Grand Canyon
HIST 308 American Cities and Nature (Not offered in 2013-2014)
PHIL 243 Animal Ethics: The Moral Status of Animals
POSC 209 Place, Politics, and Citizen Mobilization
POSC 212 Environmental Justice (Not offered in 2013-2014)
POSC 268 Global Environmental Politics and Policy
POSC 333 Global Social Changes and Sustainability* (Not offered in 2013-2014)
RELG 243 Native American Religious Freedom (Not offered in 2013-2014)
SOAN 203 Anthropology of Good Intentions
SOAN 210 Principles of Demography (Not offered in 2013-2014)
SOAN 229 Demography of the Family (Not offered in 2013-2014)
SOAN 234 Ecology, Economy, and Culture (Not offered in 2013-2014)
SOAN 251 Guatemala Prog: Resource Mgmt, Community Develpmnt \& Soc Change in Guatemala \& Chiapas
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2013-2014)
SOAN 333 Environmental Anthropology
(3) Landscapes and Perception
(i) Environmental Science: Take any two of the following:

BIOL 221 Ecosystem Ecology
BIOL 371 Seminar on Human Dominated Ecosystems (Not offered in 2013-2014)
ENTS 254 Topics in Landscape Ecology
ENTS 260 Comparative Agroecology
ENTS 265 Modeling Environmental Systems (Not offered in 2013-2014)
ENTS 272 Remote Sensing of the Environment
ENTS 287 Climate Science
GEOL 210 Geomorphology
GEOL 258 Geology of Soils (Not offered in 2013-2014)
(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 2013-2014)
AMST 240 The Midwest and the American Imagination (Not offered in 2013-2014)
ARTH 266 Planning Utopia: Ideal Cities in Theory and Practice (Not offered in 20132014)

ARTH 267 Gardens in China and Japan
ARTS 113 Field Drawing
ARTS 212 Studio Art Seminar in the South Pacific: Mixed-Media Drawing (Not offered in 2013-2014)
ARTS 275 Studio Art Seminar in the South Pacific: Physical \& Cultural Environment of Australia \& New Zealand (Not offered in 2013-2014)
BIOL 375 Natural History of Minnesota (Not offered in 2013-2014)
CLAS 222 Nature and the Environment in the Ancient World (Not offered in 2013-2014)
ENGL 236 American Nature Writing
ENGL 247 The American West (Not offered in 2013-2014)

ENGL 248 Visions of California
ENTS 180 Basic Principles of Sustainable Design (Not offered in 2013-2014)
ENTS 200 Food and Agriculture (Not offered in 2013-2014)
ENTS 215 Environmental Ethics
ENTS 275 Urban Ecology
HIST 227 History of the American West
HIST 306 American Wilderness
HIST 307 Wilderness Field Studies: Grand Canyon
HIST 308 American Cities and Nature (Not offered in 2013-2014)
POSC 212 Environmental Justice (Not offered in 2013-2014)
RELG 243 Native American Religious Freedom (Not offered in 2013-2014)
SOAN 234 Ecology, Economy, and Culture (Not offered in 2013-2014)
SPAN 260 Forces of Nature
(4) Water Resources
(i) Environmental Science: Take any two of the following:

CHEM 328 Environmental Analysis (Not offered in 2013-2014)
ENTS 288 Abrupt Climate Change (Not offered in 2013-2014)
GEOL 210 Geomorphology
GEOL 340 Hydrology (Not offered in 2013-2014)
GEOL 370 Geochemistry of Natural Waters
(ii) Society, Culture and Policy: Take any two of the following:

CLAS 222 Nature and the Environment in the Ancient World (Not offered in 2013-2014)
ECON 268 Economics of Cost Benefit Analysis (Not offered in 2013-2014)
ECON 271 Economics of Natural Resources and the Environment
ECON 273 Water and Western Economic Development
ECON 275 Law and Economics
ENTS 215 Environmental Ethics
ENTS 310 Topics in Environmental Law and Policy
HIST 306 American Wilderness
HIST 307 Wilderness Field Studies: Grand Canyon
HIST 308 American Cities and Nature (Not offered in 2013-2014)
POSC 268 Global Environmental Politics and Policy
POSC 333 Global Social Changes and Sustainability* (Not offered in 2013-2014)
VI. Topical Seminar ( 6 credits): All students must take one 300-level seminar that includes an individual research paper. This course may also count as a focus elective. Courses that fulfill this requirement are:

BIOL 374 Seminar: Grassland Ecology (Not offered in 2013-2014)
BIOL 375 Natural History of Minnesota (Not offered in 2013-2014)
CHEM 328 Environmental Analysis (Not offered in 2013-2014)
ENTS 310 Topics in Environmental Law and Policy
GEOL 340 Hydrology (Not offered in 2013-2014)
HIST 306 American Wilderness
HIST 307 Wilderness Field Studies: Grand Canyon
HIST 308 American Cities and Nature (Not offered in 2013-2014)
POSC 333 Global Social Changes and Sustainability* (Not offered in 2013-2014)
VII. 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, AI, WR1, QRE, Fall-J. Weisberg
101. 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
102. 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, Not offered in 2013-2014
103. 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, Not offered in 2013-2014
104. Public Rhetoric and Environmental Science In this course, students will pursue projects based in environmental science and aimed at public audiences. Forms may include grant proposals, articles for the popular press, talks aimed at peer scientists, the general public, or school groups, and posters for various audiences. In all cases, purpose, audience, and form will be carefully considered for effective communication of science. Students can expect frequent revision, assiduous peer review responsibilities, and presentation of individual projects orally and in more than one form of writing. 6 credits, ND, WR; NE, WR2, QRE, Not offered in 2013-2014
105. 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
106. Research Methods in Environmental Studies This course covers various methodologies that are used to prosecute interdisciplinary academic research relating to the environment. Among the topics covered are: identification of a research question, methods of analysis, hypothesis testing, and effective rhetorical methods, both oral and written. 3 credits, ND; FSR, QRE, Spring-K. Smith
107. 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. 6 credits, SS; SI, IS, QRE, Fall-T. Nega
108. Agroforestry Systems: Local and Global Perspectives This course will examine the principles and practices of tropical and temperate agroforestry systems. Focus will be given to the ecological structure and function of agroforests, the economic costs and benefits of agroforests, and the social context in which agroforests operate. Specific topics include plant/soil relationships, competition and complementarity, biogeochemical cycling, design principles, and the synergies and tradeoffs among economic, social, and ecological management goals. 6 credits, SS; SI, Not offered in 2013-2014
109. 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, Winter-T. Nega
110. 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 U.S. 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, Fall-D. Hougen-Eitzman
111. 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, Winter-D. Hougen-Eitzman
112. Materials Science, Energy, and the Environment Drawing on chemistry and physics principles, this course will focus on the relationship between the structure and physical properties of materials, how materials science can address environmental and energy challenges, and the technological and societal impacts of materials development. Topics to be covered will vary from year to year, but may include material life cycle assessment, traditional plastics and biodegradable alternatives, materials and technologies for solar energy conversion, and the role of materials in developing energy efficient buildings. Students who have taken Physics 260 may not take Environmental and Technology Studies 262. Prerequisite: Physics 151, 152, 153, or 165 or Chemistry 123 or 128.6 credits, MS, WR; NE, WR2, Offered in alternate years, Not offered in 2013-2014

## 264. Tanzania and Ethiopia Program: Agriculture and Rural Livelihoods in Sub-Saharan Africa

Smallholder agriculture is the mainstay of livelihoods in much of Sub Saharan Africa. In east Africa, for example, smallholder farming accounts for about seventy-five percent of agricultural production and over seventy-five percent employment. Yet the productivity of the sector is very low to the point that famine is a recurrent phenomenon. In this course, students will study the structure of the smallholder farming communities, the economic and institutional constraints under which these farmers operate, and current efforts to address them. The group will explore these issues at various sites throughout the program. 6 credits, SS; SI, IS, QRE, Offered in alternate years, Not offered in 2013-2014
265. Modeling Environmental Systems Different scientific disciplines are good at characterizing environmental systems. In this class, biogeochemical cycles relating to the rates of transport of matter and energy among water, soil, and the atmosphere will be studied as one way to sort out major local, regional, and global environmental issues. However, complex interactions among components forbid a detailed understanding of systems as they change over time. Rate modeling activities will be used in order to develop a better sense of the ways that systems change over time. Prerequisite: One of the following: Chemistry 128, Biology 210, Biology 221, or another introductory science class with permission of the instructor. 6 credits, MS; NE, QRE, Not offered in 2013-2014
271. 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, SS; SI, QRE, Spring-A. Swoboda
272. Remote Sensing of the Environment This course provides an introduction to the use of remotely sensed imagery and the application of remote sensing in environmental and natural resources management. Topics include raster-vector integration, geometric and atmospheric correction, spatial and spectral enhancement, image classification, change detection, and spatial modeling. This course will involve both lecture classes that will be used for presentation of fundamental topics and theory and sessions devoted to providing hands-on experience in the processing and interpretation of remotely sensed imagery. Prerequisite: Environmental Studies 120 is recommended but not required. 6 credits, MS; NE, Winter-M. Schmitt-Harsh
275. Urban Ecology This course will examine the interdisciplinary field of urban ecology, seeking to address such questions as: How do cities function as social-ecological systems? What makes cities sustainable and resilient? How are urban dwellers implicated in the environmental processes around them? Topics include urban metabolism, cities as social-ecological systems, land use planning and design principles, and the hydrological, biogeochemical, and atmospheric processes of urban environments. 6 credits, NE, Spring-M. Schmitt-Harsh
280. Tanzania and Ethiopia Program: Research Projects on Conservation and Development The aim of this course is to equip students with the necessary research, evaluation and communication skills in order to carryout their research projects successfully. Topics covered includes understanding of the frameworks within which knowledge is communicated and gained as well as the particular skills and techniques that make that possible. 4 credits, ND; NE, Not offered in 2013-2014
284. Tanzania Program: Cultural Studies The course is intended to expose students to the cultural heritages of Tanzania and Ethiopia. Among the cultural activities involved in the course include visits to historical cultural sites and museums, guest lectures, and lessons in local cuisines. 2 credits, $S / C R / N C, N D ; N E$, Not offered in 2013-2014
285. Tanzania and Ethiopia Program: Wildlife Conservation and Livelihoods This field seminar will explore the evolution of wildlife management in Tanzania and Ethiopia. At various sites along the program route students will examine the tension between wildlife conservation and people's livelihoods, discuss with local experts, and carry out a short research to develop a better understanding of the challenges/opportunities towards developing a sustainable land use system that meets the needs of the local people while sustaining the resilience of wildlife populations. Students will write a series of short papers that summarizes their understanding, focusing on how the sites visited fit into the larger debate on conservation and development. 6 credits, SS; SI, IS, QRE, Offered in alternate years, Not offered in 2013-2014
287. Climate Science In this course, we will explore the state of the science of the modern global climate. The course will include a discussion of the impact of greenhouse gases and aerosol particles on the global climate system, and attention will be paid to understanding global cycles as well as global climate models. In order to understand the underlying science, geoengineering schemes to "fix" the global climate system will be investigated. Throughout the course, our emphasis will be on a quantitative, scientifically rigorous understanding of the complex climate system. Prerequisite: One introductory course in Biology (125 or 126), Chemistry (123 or 128), Geology (110 or 120), or Physics (two five-week courses or one ten-week course from 131-165) and Math 111 or 215 , or consent of the instructor. 6 credits, MS; NE, QRE, Winter-D. Gross
288. Abrupt Climate Change The field of abrupt climate change seeks to understand very fast changes, or "tipping points," in historical climate records. Course topics 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 trends in global climate change. The course will directly address our future vulnerability to abrupt climate change through cases studies of past human civilizations. Includes a term-long multimedia team project, with an academic civic engagement component, at the intersection of abrupt climate change and an issue of human concern. Prerequisite: One introductory course in Biology (125 or 126) or Chemistry (123 or 128) or Geology (115 or 120) or Physics (two five-week courses or one ten week course from 131 through 165). 6 credits, MS, WR; NE, WR2, QRE, Not offered in 2013-2014
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, Spring-T. Nega
310. Topics in Environmental Law and Policy This seminar will examine topical issues in domestic and international environmental law and policy. We will aim to understand how environmental laws work to achieve policy objectives, with attention also to debates about the role of markets and community-based environmental management. The specific topics may change from year to year, but may include approaches to sustainable development, sustainable agriculture, protection of endangered species, and conservation and management of water resources. This course has no prerequisites and is suitable for students of environmental studies, political science, international relations and political economy. 6 credits, ND; SI, Offered in alternate years, Winter-K. Smith
372. Coffee Ecologies and Livelihoods This course presents an overview of the environmental, social and economic dimensions of coffee production, commercialization and consumption. Specifically, we will cover the following topics: 1) How coffee is produced and the challenges and opportunities that affect the livelihoods of coffee producers; 2) How coffee is marketed in the global economy, including a comparison of conventional and alternative markets (fair trade, organic, shade grown, etc.); 3) The opportunities and challenges to integrate coffee production with environmental conservation initiatives. The course will be run as a seminar with regular discussions and presentations by students. 6 credits, NE, WR2, Spring-M. Schmitt-Harsh
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, Fall-K. Smith
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/NC, ND; NE, Winter-Staff

## EUROPEAN STUDIES CONCENTRATION (EUST)

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 offcampus experiences in Europe with a coherent set of courses on campus to achieve a greater understanding of both new and old Europes.

## Requirements for the Concentration

1. EUST 110: Introduction to European Studies: The Nation State in Europe
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 History of Printmaking
ARTH 172 Modern Art: 1890-1945
ARTH 223 Women in Art (Not offered in 2013-2014)
ARTH 226 The Gothic Cathedral (Not offered in 2013-2014)
ARTH 240 Art Since 1945
ARTH 245 Modern Architecture (Not offered in 2013-2014)
ARTH 247 Architecture Since 1950
ARTH 285 The Art of Death in the Middle Ages (Not offered in 2013-2014)
ARTH 286 Legacies of the Avant-Garde: Dada Then and Now
ARTH 287 Legacies of the Avant-Garde: Constructivism Then and Now (Not offered in 2013-2014)
ARTH 340 Theories of Postmodernism (Not offered in 2013-2014)
CAMS 211 Film History II
CAMS 214 Film History III (Not offered in 2013-2014)
CAMS 228 Avant-Garde Film \& Video from Dada to the Beats (Not offered in 2013-2014)
CAMS 239 Cinemas and Contexts: East European Film
ECON 233 European Economic History
ECON 250 History of Economic Ideas
ENGL 114 Introduction to Medieval Narrative (Not offered in 2013-2014)
ENGL 135 Imperial Adventures (Not offered in 2013-2014)
ENGL 210 From Chaucer to Milton: Early English Literature
ENGL 309 Renaissance Selves (Not offered in 2013-2014)
ENGL 350 The Postcolonial Novel: Forms and Contexts (Not offered in 2013-2014)
EUST 100 Allies or Enemies? America through European Eyes
EUST 279 Cross Cultural Psychology in Prague: Nationalism, Minorities, Migrations (Not offered in 2013-2014)
FREN 206 Contemporary Francophone Culture
FREN 248 Paris Program: Representations of Islam in France
FREN 249 Paris Program: Identity Crossings: France-Morocco
FREN 349 Paris Program: Identity Crossings: France-Morocco
FREN 360 Topics in French Studies: Algeria-France
GERM 230 From Gutenberg to Gates: The History and Practice of Printing
GERM 250 Tense Affinities: A History of German Jewish Culture (Not offered in 20132014)

HIST 137 Early Medieval Worlds (Not offered in 2013-2014)
HIST 138 Crusades, Mission, and the Expansion of Europe
HIST 139 Foundations of Modern Europe (Not offered in 2013-2014)
HIST 140 The Age of Revolutions: Modern Europe, 1789-1914
HIST 141 Europe in the Twentieth Century (Not offered in 2013-2014)
HIST 202 Iconoclasm in the Early Middle Ages (Not offered in 2013-2014)
HIST 203 Papacy, Church and Empire in the Age of Reform (Not offered in 2013-2014)
HIST 207 Rome Program: A Roman Journal: Travelers' Accounts as Source and Experience (Not offered in 2013-2014)
HIST 230 Institutional Structure and Culture in the Middle Ages (Not offered in 20132014)

HIST 231 Mapping the World Before Mercator
HIST 232 Renaissance Worlds in France and Italy

HIST 233 Cultures of Empire: Byzantium, 710-1453 (Not offered in 2013-2014)
HIST 236 Women's Lives in Pre-Modern Europe (Not offered in 2013-2014)
HIST 237 The Enlightenment (Not offered in 2013-2014)
HIST 249 Two Centuries of Tumult: Modern Central Europe (Not offered in 2013-2014)
HIST 268 The Indian Ocean World in the Age of European Expansion (Not offered in 2013-2014)
HIST 347 The Global Cold War
MELA 230 Jewish Collective Memory
MUSC 111 Classical Music: An Introduction
MUSC 120 Introduction to Opera (Not offered in 2013-2014)
MUSC 122 Symphonies from Mozart to Mahler (Not offered in 2013-2014)
MUSC 210 Medieval and Renaissance Music (Not offered in 2013-2014)
MUSC 211 Baroque and Classical Music (Not offered in 2013-2014)
MUSC 312 Romantic Music
PHIL 274 Existentialism (Not offered in 2013-2014)
POSC 120 Comparative Political Regimes
POSC 228 Foucault: Bodies in Politics (Not offered in 2013-2014)
POSC 244 The Politics of the Celtic Fringe (Not offered in 2013-2014)
POSC 247 Identity and Belonging in the New Europe: Comparative Nationalism
POSC 255 Post-Modern Political Thought (Not offered in 2013-2014)
POSC 259 Justice Among Nations (Not offered in 2013-2014)
POSC 263 European Political Economy
POSC 265 Capitalist Crises, Power, and Policy (Not offered in 2013-2014)
POSC 268 Global Environmental Politics and Policy
POSC 269 Issues in Postmodern Political Thought
POSC 276 Arendt: Imagination and Politics (Not offered in 2013-2014)
POSC 352 Political Theory of Alexis de Tocqueville*
POSC 358 Comparative Social Movements*
POSC 359 Cosmopolitanism* (Not offered in 2013-2014)
RELG 231 From Luther to Kierkegaard (Not offered in 2013-2014)
RELG 287 Many Marys
RELG 380 Radical Critiques of Christianity
SOAN 283 Immigration and Immigrants in Europe and the United States (Not offered in 2013-2014)
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 pan-European issues, but students will be expected to bring a comparative awareness of Europe to their learning experience.

ARTH 233 Van Eyck, Bosch, Bruegel: Their Visual Culture (Not offered in 2013-2014)
ARTH 234 Italian Renaissance Art (Not offered in 2013-2014)
ARTH 238 Rembrandt, Vermeer and Netherlandish Art
ARTH 251 Ruins and Romantics: English Gothic and Gothic-Revival Art and Architecture (Not offered in 2013-2014)
ARTH 307 Rome: The Art of Michelangelo and Caravaggio (Not offered in 2013-2014)
CAMS 212 Contemporary Spanish Cinema
CAMS 232 Cinema Directors: Tarkovsky (Not offered in 2013-2014)
CAMS 237 Cinemas \& Contexts: Russian Film (Not offered in 2013-2014)
ECON 221 Cambridge Program: Contemporary British Economy

ECON 222 Cambridge Program: The Industrial Revolution in Britain
ECON 224 Cambridge Program: The Determinants of Economic Growth and the Modern British Economy
ENGL 210 From Chaucer to Milton: Early English Literature
ENGL 211 Neoclassic, Romantic, and Victorian Literature
ENGL 213 Christopher Marlowe (Not offered in 2013-2014)
ENGL 214 Revenge Tragedy (Not offered in 2013-2014)
ENGL 216 Milton
ENGL 218 The Gothic Spirit
ENGL 222 The Art of Jane Austen
ENGL 244 Shakespeare I
ENGL 249 Irish Literature
ENGL 278 English Theater and Literature in England: Shakespeare's England
ENGL 282 English Theater and Literature in England: London Theater
ENGL 310 Shakespeare II
ENGL 313 Major Works of the English Renaissance: The Faerie Queene (Not offered in 2013-2014)
ENGL 319 The Rise of the Novel
ENGL 323 English Romantic Poetry
ENGL 327 Victorian Novel
ENGL 328 Victorian Poetry (Not offered in 2013-2014)
EUST 140 Culture or Barbarity? The German Question (Not offered in 2013-2014)
FREN 240 Sexuality and Sagacity
FREN 241 The Lyric and Other Seductions
FREN 243 Topics in Cultural Studies: Cultural Reading of Food (Not offered in 20132014)

FREN 246 Paris Program: Modern French Art
FREN 249 Paris Program: Identity Crossings: France-Morocco
FREN 340 Arts of Brevity: Short Fiction (Not offered in 2013-2014)
FREN 341 Madame Bovary and Her Avatars (Not offered in 2013-2014)
FREN 349 Paris Program: Identity Crossings: France-Morocco
FREN 351 Love, War and Monsters in Early Modern France
FREN 354 Other Worlds (Not offered in 2013-2014)
FREN 359 Twentieth Century Literature: The Novel and Memory (Not offered in 20132014)

FREN 395 Francophone Switzerland
GERM 207 Young Adult Literature (Not offered in 2013-2014)
GERM 219 German Film after World War II (Not offered in 2013-2014)
GERM 231 Damsels, Dwarfs, and Dragons: Medieval German Literature (Not offered in 2013-2014)
GERM 247 Fairy Tales, Myths, and Legends (Not offered in 2013-2014)
GERM 261 Contemporary German Fiction (Not offered in 2013-2014)
GERM 312 Rilke and His Circle (Not offered in 2013-2014)
GERM 345 Vienna: Dream and Reality (Not offered in 2013-2014)
GERM 351 The Age of Goethe (Not offered in 2013-2014)
HIST 206 Rome Program: Eternal City in Time: Urban Structure and Change (Not offered in 2013-2014)
HIST 207 Rome Program: A Roman Journal: Travelers' Accounts as Source and

Experience (Not offered in 2013-2014)
HIST 239 Britain, c. 1485-1834: From Sceptred Isle to Satanic Mills (Not offered in 20132014)

HIST 240 Imperial Russia (Not offered in 2013-2014)
HIST 241 Russia through Wars and Revolutions
HIST 243 The Peasants are Revolting! Society and Politics in the Making of Modern
France (Not offered in 2013-2014)
HIST 245 Ireland: Land, Conflict and Memory
HIST 248 Berlin Program: Monuments and Memory: A Cultural History of Berlin (Not offered in 2013-2014)
HIST 250 Modern Germany
HIST 278 The Spanish Inquisition (Not offered in 2013-2014)
HIST 346 The Holocaust
RUSS 150 Facts and Fairy Tales: Introduction to Russian Cultural History
RUSS 205 Russian in Cultural Contexts
RUSS 226 Moscow Program: Russia's Hallowed Places
RUSS 244 Russian Literature in Translation: The Novel to 1917 (Not offered in 20132014)

RUSS 261 Lolita (Not offered in 2013-2014)
RUSS 266 Dostoevsky (Not offered in 2013-2014)
RUSS 267 War and Peace (Not offered in 2013-2014)
RUSS 331 Russia's Literature of the Uncanny (Not offered in 2013-2014)
RUSS 333 Russian Literature for Children (Not offered in 2013-2014)
RUSS 336 Pushkin (Not offered in 2013-2014)
RUSS 341 The Russian Short Story
RUSS 345 Russian Cultural Idioms of the Nineteenth Century
RUSS 351 Chekhov (Not offered in 2013-2014)
RUSS 395 Senior Seminar: The Cult of Stalin (Not offered in 2013-2014)
SPAN 209 Madrid Program: Contemporary Spanish History
SPAN 244 Spain Today: Recent Changes through Narrative and Film
SPAN 247 Spanish Seminar in Madrid: Spanish and Italian Art in the Age of Velazquez
SPAN 256 Lorca, Buñuel and Dalí: Poetry, Film, and Painting in Spain (Not offered in 2013-2014)
SPAN 301 Greek and Christian Tragedy (Not offered in 2013-2014)
SPAN 320 New Spanish Voices (Not offered in 2013-2014)
SPAN 330 The Invention of the Modern Novel: Cervantes' Don Quijote (Not offered in 2013-2014)
SPAN 331 Baroque Desires
SPAN 349 Spanish Seminar in Madrid: Theory and Practice of Urban Life
SPAN 358 The Spanish Civil War (Not offered in 2013-2014)
SPAN 366 Jorge Luis Borges: Less a Man Than a Vast and Complex Literature
4. EUST 398: Senior Colloquium.
5. Concentrators must normally participate in an off-campus study program in Europe.
6. 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

100. Allies or Enemies? America through European Eyes During the nineteenth and twentieth centuries, America often served as a canvass for projecting European anxieties about economic, social and political modernization. Admiration of technological progress and political stability was combined with a pervasive antiAmericanism, which was, according to political scientist Andrei Markovits, the "lingua franca" of modern Europe. These often contradictory perceptions of the United States were crucial in the process of forming national histories and mythologies as well as a common European identity. Accordingly, this course will explore the many and often contradictory views expressed by Europe's emerging mass publics and intellectual and political elites about the United States during this period. 6 credits, AI, WR1, IS, Fall-P. Petzschmann
101. The Nation State in Europe This course explores the role of the nation and nationalism within modern Europe and the ways in which ideas and myths about the nation have complemented and competed with conceptions of Europe as a geographic, cultural and political unity. We will explore the intellectual roots of nationalism in different countries as well as their artistic, literary and musical expressions. In addition to examining nationalism from a variety of disciplinary perspectives--sociology, anthropology, history, political science--we will explore some of the watershed, moments of European nationalism such as the French Revolution, the two world wars, and the Maastricht treaty. 6 credits, HU; HI, IS, Winter-P. Petzschmann
102. Culture or Barbarity? The German Question German culture has had a profound influence on world history, but one often wonders how the culture that produced Goethe, Schiller, Luther, Beethoven, and Kant was also the source of some of the greatest atrocities of the twentieth century. We will attempt to understand the reasons for this dichotomy by considering the development of Germany within the context of Europe from Roman times to the present. 6 credits, HU; HI, IS, Offered in alternate years, Not offered in 2013-2014
103. Statebuilding in History and Theory The concept of the "state" has recently seen a scholarly renaissance, inspiring new literatures and comparative studies of Western and non-Western statehood. Its continuing relevance has been highlighted by the financial crisis and the ensuing debate about the "crisis state" as well as by various efforts at "state-building" in response to actual or perceived "failed states" around the world. In this course we use a series of case studies and methods to ask: What traditions of thinking about the state are available to us? Can the Western experience of statehood be universalized and at what cost? What are the alternatives? 6 credits, SS, WR; SI, WR2, Not offered in 2013-2014
104. Cross Cultural Psychology in Prague: Nationalism, Minorities, Migrations In this course students will be introduced to the complex phenomena of migration, nationalism, and the formation of ethnic minorities in modern Europe through theory and historical examples. among the topics covered will be European attitudes and policies toward minorities (including Jews, Roma, Muslims, and Africans) and the responses of those minorities to them from assimilation to dual identity to nationalism. 6 credits, HU ; HI, IS, Not offered in 20132014
105. 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-D. Tompkins

## FRENCH (FREN)

<a href="https://apps.carleton.edu/curricular/fren/faculty/">Browse faculty and Staff</a>

## General Information

The Department of French and Francophone Studies 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 students 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 students' 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, preferably taken in the sophomore or junior year; and 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 credits in addition to French 309 must be taken at the 300-level ( 400 does 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 (3 credits): 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 by the end of winter term. In the spring term, students will deliver an oral presentation (in English) of their work.

## 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, and anthropology. 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. Core courses: French 309, Beyond Words: The Fine Art of Writing in French, preferably taken in the sophomore or junior year; and the capstone seminar (normally French 395).
2. Literature and language: At least twenty-four credits in French language or literature, in addition to the core courses, twelve credits of which must be at the 300-level.
3. At least six credits in cultural studies such as: French 243, Topics in Cultural Studies; French 245, Francophone Literature of Africa and the Caribbean; French 249/349, the Paris Program; French 250, the Mali Program.
4. At least six credits 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; HIST 298, Junior Year History Colloquium.
5. Elective courses: 18 credits, in French, or in other departments or programs (see pre-approved courses under the concentration in French and Francophone Studies), with director's approval.
6. The Integrative Exercise (3 credits): 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 by the end of winter term. In the spring, students will deliver an oral presentation (in English) of their work

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 Language 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 and everyday vocabulary in the context of common cultural situations. Students are exposed to all four skills (reading, writing, listening, and speaking). Taught five days a week in French. Prerequisite: None. Placement score for students with previous experience in French. 6 credits, NE, Fall-Staff
102. Elementary French Building on the material covered in French 101, this course introduces complex sentences and additional verb tenses. Students apply the tools of narration in context through the reading of short literary and cultural texts. The focus of the course is on all four skills (reading, writing, listening, and speaking). Taught five days a week in French. Prerequisite: French 101 or placement score. 6 credits, NE, Winter-Staff
103. Intermediate French This course continues the study of complex sentence structures and reviews basic patterns in greater depth, partly through the discussion of authentic short stories and cultural topics. Throughout
the course, students practice all four skills (reading, writing, listening, and speaking). Taught five days a week in French. Prerequisite: French 102 or placement score. 6 credits, 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 aims to improve knowledge of France and the Francophone world and written and oral expression. Through an analysis of texts written by novelist and sociologist Azouz Begag, journalist Françoise Laborde and novelist Maryse Condé, we will discuss various aspects of national, racial and family identity in France. Prerequisite: Prerequisite: French 204 or the equivalent. 6 credits, LA, IS, Winter-C. Keïta
106. Paris Program: Cultural Themes 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. Work will include regular writing, discussion, and short presentations. Prerequisite: French 204. 6 credits, AL; HI, IS, Spring-D. Strand
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, LibÃ○ration, etc.) on the internet, and then meeting once a week to exchange ideas over coffee with a small group of students. Prerequisite: Prerequisite: French 204 or permission of the instructor. 2 credits, S/CR/NC, ND; HI, IS, Fall, Winter, Spring-C. Yandell
108. 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, $A L, R A D ; L A, I S$, Not offered in 2013-2014
109. Sexuality and Sagacity What is the relationship between sexuality and knowledge? We will attempt to answer this question through novels, poetry and plays of such authors as Ronsard, Baudelaire, Gide, Sade, Sartre, Kundera and Nimier, as well as films of Téchiné and Kassovitz. This course serves as an introduction to the study of French and Francophone literatures and aims to develop students' skills in analysis and discussion in French. Prerequisite: Prerequisite: French 204 or the equivalent. 6 credits, AL; LA, IS, Fall-C. Yandell
110. 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: Prerequisite: French 204. 6 credits, AL; LA, IS, Winter-S. Carpenter
111. Topics in Cultural Studies: Cultural Reading of Food "Tell me what you eat, I will tell you who you are." Brillat-Savarin. Through the thematic lens of food, we will study enduring and variable characteristics of French society and compare it to American and other societies when appropriate. We will analyze various cultural texts and artifacts (fiction, non-fiction, print, film, and objects) from medieval times to the present with a pinch of theory and a dash of statistics. Course may be repeated if the topic is different. Prerequisite: French 204 or equivalent. 6 credits, AL; HI, Not offered in 2013-2014
112. Francophone Literature of Africa and the Caribbean Reading and discussion of literary works, with analysis of social, historical and political issues. Prerequisite: Prerequisite: French 204. 6 credits, $A L, R A D ; L A$, IS, Spring-C. Keïta
113. Paris Program: Modern French Art Home of some of the finest and best known museums in the world, Paris has long been recognized as a center for artistic activity. In this course students will have the opportunity to study such movements as Impressionism, Expressionism, and Surrealism on site. In-class lectures and discussions will be complemented by guided visits to the unparalleled collections of the Louvre, the Muse d'Orsay, the Centre Pompidou, local art galleries, and other appropriate destinations. Special attention will be paid to the program theme. No previous Art History required. Prerequisite: French 204. 6 credits, $A L ; L A, I S$, Spring-D. Strand
114. Paris Program: Representations of Islam in France In this course, students will explore the historical,
cultural, social, and religious traces of Islam as they have been woven over time into the modern fabric of French society. Through images drawn from film, photography, television, and museum displays, they will discover the important role this cultural contact zone has played in the French experience. The course will take advantage of the resources of the city of Paris and will include excursions to museums as well as cultural and religious centers. Prerequisite: French 204 or equivalent. 6 credits, AL; LA, Spring-D. Strand
115. Paris Program: Identity Crossings: France-Morocco What does it mean to be French? How do collective memory and forgetting influence national and personal identity? What role does France's colonial legacy play in determining the definition(s) of that identity? How are the French viewed by their (former) colonial Others (with special emphasis on the Moroccan example)? How has the "French connection" influenced the way in which the Arab Spring played out in Morocco? Through literary and cultural materials offering a lively exchange of perspectives, informed by hands-on experience in both Morocco and France, we will explore these and other questions related to this richly complex topic. Prerequisite: French 204 or equivalent. 6 credits, $A L$; LA, IS, Spring-D. Strand
116. 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 CissÃ®, Cheick Oumar Sissoko, Adama Drabo, Dany KouyatÃ®, 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 2013-2014
117. 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 2013-2014
118. 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, 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 2013-2014
119. 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 (Cô d' Ivorie), Ousmane Sembéne (Senegal), Calixthe Béyala (Cameroun), Alain Mabanckou (CongoBrazzaville), 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 2013-2014
120. 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, $A L$; $L A, I S$, Spring-C. Lac
121. 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, AL; LA, IS, Not offered in 2013-2014
122. 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 five-week 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, Not offered in 2013-2014
123. Paris Program: Identity Crossings: France-Morocco What does it mean to be French? How do
collective memory and forgetting influence national and personal identity? What role does France's colonial legacy play in determining the definition(s) of that identity? How are the French viewed by their (former) colonial Others (with special emphasis on the Moroccan example)? How has the "French connection" influenced the way in which the Arab Spring played out in Morocco? Through literary and cultural materials offering a lively exchange of perspectives, informed by hands-on experience in both Morocco and France, we will explore these and other questions related to this richly complex topic. Prerequisite: French 200 -level course or permission of instructor. 6 credits, $A L ;$ LA, IS, Spring-D. Strand
124. 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, $A L ; L A, I S$, Winter-C. Yandell
125. Other Worlds What do Persians, Peruvians, Tartars, Tahitians and Eldoradans have in common? For one thing, they're all present in eighteenth-century France's heavily fantasized view of the world beyond its borders. By looking at texts and events of the long eighteenth century, including travel literature, voyages of discovery, and the Encyclopédie, we will examine the way the French used the outside world as a screen upon which to project its own imaginings. Authors may include Mme de Graffigny, Montesquieu, Bougainville, Diderot, Voltaire, Sade, Mme de Staël and Voltaire, among others. Conducted in French. Prerequisite: French 204, recommended preparation: French 206, 240, or 241. 6 credits, AL; LA, IS, Not offered in 2013-2014
126. Twentieth Century Literature: The Novel and Memory Marcel Proust's quest to retrieve the past set the stage for future writers who have undertaken the challenging task of probing what bell hooks has called "the debris of history." In this course, we will study representative novels and films dealing with memory, paying particular attention to the high stakes involved in remembering (and forgetting) at the intersection of personal story and history. Prerequisite: 200 -level French course or permission of instructor. 6 credits, AL; LA, IS, Offered in alternate years, Not offered in 2013-2014
127. Topics in French Studies: Algeria-France For the historian Benjamin Stora, the close and complex bond between France and Algeria can be compared to a forced marriage, 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 extended relationship between Algeria and France through a variety of literary and historical texts (as well as several relevant films). Taught in French. Prerequisite: 200 -level French course or permission of instructor. 6 credits, $A L ;$ LA, IS, Fall-D. Strand
128. 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 2013-2014
129. 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. Conducted in French. 6 credits, AL; LA, IS, Not offered in 2013-2014
130. Francophone Switzerland This interdisciplinary course will explore the unique position of FrenchSwissness within multicultural and officially quadrilingual Switzerland, and its fascinatingly complex ties with neighboring France, specifically Paris. We will consider a range of perspectives from a variety of disciplines including literature, history, geography, and the visual arts. Alpine culture, l'esprit de Genéve, Swiss mythmaking, Röstigraben ("Röstiditch"), and the legacy of Calvinism will be among the studied topics. Readings will be by Jean-Jacques Rousseau, Germaine de Staël, Le Corbusier, and many other luminaries. Taught in

French. Prerequisite: French 240-level or equivalent. 6 credits, LA, IS, Spring—É. Pósfay
400. 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 credits, $S / N C, N D$, Fall, Winter, Spring-E. Posfay

## FRENCH AND FRANCOPHONE STUDIES (FRST)

## FRENCH AND FRANCOPHONE STUDIES CONCENTRATION


#### Abstract

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.

\section*{Requirements for the Concentration}

Language Requirement: French 204 or equivalent Two Supporting Courses: EUST 110 The Nation State in Europe FREN 243 Topics in Cultural Studies: Cultural Reading of Food (not offered in 2013-


FREN 249/349 Paris Program: Identity Crossings: France-Morocco
FREN 250 Mali Program: Film and Society in Mali (not offered in 2013-2014)
HIST 140 The Age of Revolutions: Modern Europe, 1789-1914
HIST 141 Europe in the Twentieth Century (not offered in 2013-2014)
HIST 237 The Enlightenment (not offered in 2013-2014)
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 Sexuality and Sagacity
FREN 241 The Lyric and Other Seductions
FREN 243 Topics in Cultural Studies: Cultural Reading of Food (not offered in 2013-
2014)

FREN 245 Francophone Literature of Africa and the Caribbean
FREN 249/349 Paris Program: Identity Crossings: France-Morocco
FREN 340 Arts of Brevity: Short Fiction (not offered in 2013-2014)
FREN 341 Madame Bovary and Her Avators (not offered in 2013-2014)
FREN 351 Topics in Sixteenth Century Literature: Metamorphoses: Love, War and Monsters in Early Modern France

FREN 354 Other Worlds (not offered in 2013-2014)
FREN 359 The Novel and Memory (not offered in 2013-2014)
FREN 360 Topics in French Studies: Algeria-France*
Group II History and Art History

ARTH 286 Legacies of the Avant-Garde: Constructivism Then and Now
FREN 246 Paris Program: Modern French Art
FREN 251 Mali Program: Negotiating the Past: The Challenges of Nation-building in Mali (not offered in 2013-2014)

HIST 137 Early Medieval Worlds (not offered in 2013-2014)
HIST 139 Foundations of Modern Europe (not offered in 2013-2014)
HIST 140 Modern Europe 1789-1914
HIST 141 Europe in the Twentieth Century (not offered in 2013-2014)
HIST 184 Colonial West Africa (not offered in 2013-2014)
HIST 232 Renaisance Worlds in France and Italy
HIST 282 Masquerades in Africa (not offered in 2013-2014)
Group III: Social Sciences: Anthropology, Economics, Political Science
ECON 233 European Economic History
FREN 248 Paris Program: Representations of Islam in France
POSC 251 Modern Political Philosophy: Modernity and Its Discontents
POSC 352 Political Theory of Alexis de Tocqueville
POSC 364 Capitalism and Its Critics
POSC 371 Modern Political Philosophy: Modernity and Its Discontents
SOAN 256 Ethnography of Africa (not offered in 2013-2014)
Senior Seminar: FREN 395 Francophone Switzerland
For courses other than those in the French department, students may 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)

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 and Environmental Studies are welcome to enroll in geology courses numbered 200 and above without the introductory geology prerequisite with permission of the instructor. Students may receive credit for only one 100 -level geology course.

## Requirements for a Major

In addition to any introductory geology ( 100 level) 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 offcampus 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. Note: Students may receive credit for only one 100-level geology course.

## 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, FallC. Cowan
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-C. Davidson, B. Haileab
102. Climate Change in Geology 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 and one Saturday field trip. Not open to students who have taken another Geology 100-level course. 6 credits, MS; LS, QRE, Not offered in 2013-2014
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 another Geology 100 -level course. 6 credits, MS; LS, Spring-M. Savina
104. Geomorphology Study of the geological processes and factors which influence the origin and development of the surficial features of the earth, with an emphasis on some or all of the processes in Minnesota. Laboratories and field trips included. Prerequisite: One introductory (100-level) Geology course or consent of instructor. 6 credits, MS, WR; LS, WR2, QRE, Offered in alternate years, Fall-M. Savina
105. 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. Prerequisite: One introductory lab science course. 6 credits, MS, WR; LS, QRE, Not offered in 2013-2014
220. 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 (100-level) Geology course. 6 credits, MS, WR; LS, WR2, Fall-S. Titus
221. 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 100level geology course or an introductory biology course, or consent of the instructor. 6 credits, MS, WR; LS, WR2, Spring-C. Cowan
222. Tropical Marine Biogeoscience This course will focus on background needed to perform fieldwork in Belize. We will use sources from the primary literature, as well as borrowings from textbooks, to learn some basics about oceanography, tropical marine ecosystems, benthic marine organisms and their habitats, the Caribbean Sea, and global changes that are affecting these things. Students will work in teams to formulate research topics that they will then pursue during the two weeks of fieldwork over Winter Break. We may need to get together several times during Fall Term to practice snorkeling in the pool. This course is part of the offcampus winter break Belize Program, involving two linked courses in fall and winter terms. This course is the first class in the sequence. Prerequisite: One 200-level course in either Geology or Biology. 6 credits, ND; NE, Not offered in 2013-2014
223. Field Research in Belize Tropical Marine Environments This course is the second part of a two-term course sequence begining with Geology 232. This course will consist of fieldwork in Belize for two weeks at the University of Belize's Calabash Caye Field Station followed by on-campus work during Winter Term. Prerequisite: Geology 232. 6 credits, ND; NE, Not offered in 2013-2014
224. Geophysics This applied geophysics course focuses on understanding the near-surface structure of the Earth using a hand-on approach. Students will collect, process, model, and interpret geophysical data using gravitational, magnetic, and seismic methods. Weekly laboratories and one weekend field trip will be required. Prerequisite: One Introductory 100 -level Geology course and one Physics introductory course (131, 132, 141, 142) or consent of the instructors. 6 credits, MS; LS, Spring-S. Titus, B. Titus
225. 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 (100-level) Geology course, or Chemistry 123 or 128. 6 credits, MS; LS, Winter—C. Davidson
226. 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
227. 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 (100-level) geology course. 6 credits, MS, WR; LS, WR2, Not offered in 2013-2014
228. Geology in New Zealand: North Island In this course, we will study modern and ancient geologic systems in the North Island with a view to understanding the volcanic, sedimentary and geomorphologic history of New Zealand. These may include projects and visits to sites such as volcanic systems, hot springs, modern marine-estuarine settings, and terraced fluvial-alluvial systems, among others 6 credits, MS; NE, Offered in alternate years, Winter-C. Cowan
229. Geology in New Zealand: Topics in North Island Geology This reading and discussion course is tied to the half of the program focusing on the Geology of the North Island. Including topics such as: (a) risk and mitigation of flood, landslide, volcanic and seismic hazards in New Zealand (b) connections between the Gondwanan geologic heritage of New Zealand and its natural ecosystems, and (c) present environmental geology issues in New Zealand. 3 credits, S/CR/NC, ND; NE, Offered in alternate years, Winter-C. Cowan
230. Geology in New Zealand: South Island In this course, we will study the tectonic evolution of the South Island. Participants will work in small teams to hone their field observation skills, make structural measurements, and develop their mapping skills in several field sites across the South Island. Visits to additional field sites such as glaciers, fjords, slivers of the mantle, and the Alpine fault are possible. 6 credits, MS; NE, Offered in alternate years, Winter-S. Titus
231. Geology in New Zealand: Topics in South Island Geology This reading and discussion course focuses on the Geology of the South Island. Readings, exercises, and discussions will focus on topics such as: (a) the development and assembly of New Zealand, (b) the distribution of current plate motion across New Zealand, and (c) how tectonic processes continue to shape New Zealand. 3 credits, S/CR/NC, MS; LS, Offered in alternate years, Winter-S. Titus
232. 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 student-directed investigation of critical areas of study in hydrology. Prerequisite: Geology 210 or junior/senior standing in one of the physical sciences. 6 credits, ND, WR; LS, WR2, QRE, Not offered in 2013-2014
233. 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 2013-2014
234. 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. 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, MS, WR; LS, WR2, Not offered in 2013-2014
235. 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 (100-level) Geology course, six credits of Physics numbered 131 and above is recommended. 6 credits, MS; LS, Not offered in 2013-2014
236. 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, MS, WR; LS, WR2, QRE, Winter-B. Haileab
237. 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, Fall, Winter, Spring-Staff

## GERMAN (GERM)

<a href="https://apps.carleton.edu/curricular/germ/faculty/">Browse faculty and Staff</a>

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 acquire the necessary skills 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. German 208 is intended as a bridge course to help students make the transition from German 204 to more advanced courses. 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, 207 or 208); 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, 209, 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, 208 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 offcampus studies programs may be applied toward the certificate.

## German Courses

100. Views of Reality: Understanding Literary Works of the Past Views of reality constantly change over time and find their expression in art and literature. This course will focus on European views of reality in the eighteenth century, a century of contentment as well as revolution. Works by such authors as Goethe, Voltaire, Schiller and Pope will be studied within their historical and social context. Readings and discussion in English. 6 credits, AI, WR1, Fall-R. Paas
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, NE, Fall-L. Butt, R. Paas
102. Elementary German Further study of the basic structural patterns of the German language. Prerequisite: German 101, or appropriate placement score. 6 credits, NE, Winter-L. Butt, R. Paas
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, NE, Spring-L. Butt, R. Paas
104. Intermediate German Critical reading and discussion of selected German plays, short stories and/or films. Prerequisite: German 103 or appropriate placement score. 6 credits, NE, Fall-A. Ulmer
105. 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, ND; NE, Fall-S. Leonhard
106. Composition and Conversation Short texts, films, video clips and other cultural materials serve as the basis for discussions of contemporary German and Austrian culture. Prerequisite: German 204 or the equivalent. 6 credits, NE, Not offered in 2013-2014
107. 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, AL; LA, Not offered in 2013-2014
108. German in Cultural Contexts In this course students continue to develop skills of narration, listening comprehension, and writing, while exploring issues of German cultural life. The theme of this year's course is "From Household Tales to Hollywood: German Fairy Tales and Their Cinematic Adaptations." This course juxtaposes some of the Grimm Brothers' most influential, fascinating, and disturbing fairy tales with their popular transformations on the screen. We will discuss the roles of Jacob and Wilhelm Grimm as authors and collectors of folk tales in the nineteenth century, and explore other European and Arabic influences on the German MÃarchen tradition. Prerequisite: German 204 or the equivalent. 6 credits, LA, IS, Winter-L. Butt
109. Reading German This course is designed to help students make the transition to reading German texts of their own choosing in any academic discipline. May be retaken for additional credits. Prerequisite: German 204 or the equivalent. 2 credits, S/CR/NC, ND; NE, Winter-R. Paas
110. 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-R. Paas
111. 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 2013-2014
112. 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, $S / C R / N C, A L ; H I, S p r i n g-R$. Paas
113. 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, Not offered in 2013-2014
114. 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 2013-2014
115. 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. Prerequisite: German 204 or equivalent. 6 credits, HU; HI, IS, Not offered in 2013-2014
116. Berlin Program: Theater in Berlin This course will be structured around the theater productions of the fall season in Berlin. 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. Prerequisite: German 204 or equivalent. 6 credits, AL; LA, IS, Offered in alternate years, Fall-S. Leonhard
117. Contemporary German Fiction In this course we will explore very contemporary writings in German from the last decade or two and analyze current trends in literature, society and politics. Readings will include novels, short stories, plays and graphic fiction. Conducted in German. Prerequisite: German 204. Recommended preparation: at least one course above German 204. 3 credits, AL; LA, IS, Not offered in 2013-2014
118. Berlin Program: Projects in the Arts Students will choose a topic related to German culture/ politics on which they work throughout the term. The main objectives of the course are for students to speak and write in German, and to interact with native speakers and the culture at large. Possible topics are the museum culture, the significance of soccer in German society, the music scene in Berlin, a personal history project (interviews with Berliners), gay Berlin, and the role of Germany within Europe. Students will meet first as a group, then individually to discuss and improve on their work, before presenting it to the class. Prerequisite: German 103 or consent of instructor. 4 credits, S/CR/NC, ND; NE, IS, Offered in alternate years, Fall-S. Leonhard

## 290. Berlin Program: Independent Reading 2 credits, S/CR/NC, NE, Fall-S. Leonhard

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, Not offered in 2013-2014
313. Mystery, Murder, Madness: Crime Stories in German Literature and Film Following a trajectory from Friedrich Schiller's crime report Der Verbrecher aus verlorener Ehre to films of the Weimar Republic such as Caligari and $M$, this course focuses on the rich German tradition of crime and detective stories. We will approach this genre as a literary and cinematic space where contested concepts of truth, justice, and morality emerge, and where changing notions of perception come to the fore. Conducted in German. Prerequisite: German 204 or the equivalent. 6 credits, AL; LA, IS, Offered in alternate years, Spring-L. Butt
314. Vienna: Dream and Reality The course will examine the beginnings of Modernism in Austrian culture, music, theater, art, architecture, and philosophy, focusing on literature within its wider context. Students will look at such thinkers and artists as Freud, Schnitzler, Hofmannsthal, Hermann Bahr, Karl Kraus, Robert Musil, Peter Altenberg, and Wittgenstein, as well as the great musicians, architects, and painters of the time. The group will survey the history and culture of the period between 1870 and 1930, with the 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; LA, IS, Not offered in 2013-2014
315. 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 2013-2014
316. Studies in Twentieth-Century Prose and Poetry An examination of the modern novella and lyric, including works by such authors as Kafka, Brecht, Hesse, Rilke, George, Hofmannsthal, Mann, Frisch, Wolf, Bäll, Frischmuth, Kaschnitz, and others, in their historical and cultural context. Prerequisite: German 204 or equivalent. 6 credits, LA, Winter-A. Ulmer
317. Integrative Exercise Examining an aspect of German literature across eras or genres. 6 credits, $\mathrm{S} / \mathrm{NC}$, ND, Fall, Winter-Staff

## HEBREW

See Middle Eastern Languages.

## HISTORY (HIST)

The History major introduces students to major civilizations of the past while it develops skills of research, analysis and expression that are essential to students in the Liberal Arts environment. History majors learn not only what happened in the past, but also how to explain significant elements of continuity and how to analyze moments of profound rupture. Thus a History major develops a deep appreciation for the durable phenomena of world cultures (the persistence of poverty, the transcendence of genius, the corruption of political power), as well as a keen analytical framework for understanding transformative moments in time (the American, Mexican and French Revolutions, the Civil Rights Movement, etc.)

In view of the variety of departmental offerings, History majors are allowed to design their own mix of courses. The department offers guidelines, attentive advising, and carefully selected requirements to ensure coherence in the student's growing mastery of the discipline. Still, much of the choice on specific courses is left up to the individual student. The student's pathway through the major should reflect his or her particular interests, abilities and career plans.

See History Department Web site: https://apps.carleton.edu/curricular/history/

## Requirements for a Major

The major requires a total of 72 credits from courses taken in the history department. History 100's and the comprehensive exercise count toward the total number of credits. Certain courses offered outside the history department count toward the major; these courses are specified in the course catalog. 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, Environmental History, Communism, Economic History). 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), the History Colloquium (History 298) and Advanced Historical Writing (History 398). Students prepare for the senior integrative exercise by submitting an acceptable proposal, normally in fall term of the senior year and writing a senior 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. Two new off-campus programs in History are offered in 2013-2014, a Spring Break Program at the Grand Canyon and a Spring Term Off Campus Experience in China and Korea. Regular OCS programs in the department include Winter Break in Dubai: Voice and Visibility in Afro-Arab Women's History and Spring Term in Rome: History, Religion and Urban Change. Other additional off-campus programs and graduate studies programs and information can be found in the history department lobby and at the following sites: History Department Off-Campus Programs page and the Off-Campus Studies office.

## Courses from other departments

(may be included in the seventy-two credits total and count towards fields).
AMST 115 Introduction to American Studies
CLAS 227 Greek History
CLAS 228 Roman Republic (Not offered in 2013-2014)
CLAS 230 Greeks Go Global: The Hellenistic World (Not offered in 2013-2014)
CLAS 231 The Roman Principate (Not offered in 2013-2014)
ECON 232 American Economic History: A Cliometric Approach (Not offered in 20132014)

ECON 233 European Economic History
EDUC 245 History of American School Reform (Not offered in 2013-2014)
LTAM 270 Chile's Septermber 11th: History and Memory Since the Coup

RELG 140 Religion and American Culture
Please ask the history department chair or your adviser about any courses in African/African American Studies, American Studies, Asian Studies, Classics, Cross Cultural Studies, Economics, Education, European Studies, 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

100. Medicine and Disease in the Making of the Modern World One of the many dimensions of globalization is the spread and exchange of pathogens. The recent scare of a swine flu pandemic and the outbreak of SARS in 2008 are reminders of the growing difficulties in containing infectious diseases. Using specific diseases as case studies this course looks at the politics of disease prevention and examines how the disease landscape of the world has developed from 1500 to present. We will consider the role of Western medicine in the process of colonization/globalization, the construction of race, and social control. Disease case studies include smallpox, yellow fever, cholera, plague and AIDS. 6 credits, Al, WR1, Fall-Amna Khalid
101. Music and Politics in Europe since Wagner This course examines the often fraught, complicated relationship between music and politics from the mid-nineteenth century through the mid-twentieth. Our field of inquiry will include all of Europe, but will particularly focus on Germany, Poland, and the Soviet Union. We will look at several composers and their legacies in considerable detail, including Beethoven, Wagner, and Shostakovich. While much of our attention will be devoted to "high" or "serious" music, we will explore developments in popular music as well. 6 credits, AI, WR1, IS, Fall-D. Tompkins
102. American Farms and Food What's for dinner? The answers to that question--and others like it--have never been more complicated or consequential than they are today. Behind a glance into the refrigerator or the shelves of any supermarket lie a myriad of concerns, ideas, and cultural developments that touch on everything from health and nutrition to taste, tradition, identity, time, cost, and environmental stewardship. This seminar will consider the evolution of these interconnected issues in American history, giving particular attention to the rise, inner workings, and effects of the agro-industrial food system and to contemporary movements that seek a new path forward. 6 credits, WR; AI, WR1, IDS, Fall-G. Vrtis
103. Warriors, Saints, and Scholars in Anglo-Saxon England In this seminar, we investigate the world of the learned monk Bede (c. 673-731), one of the most influential scholars 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 own writings, contemporary Latin and Old English sources, art, and archaeological evidence, we shall explore issues like Christian vs. Germanic rulership; the nature of religious conversion and sanctity in early medieval societies; Ireland and England as outposts of classical and Christian culture; and historical thought and writing in the early Middle Ages. 6 credits, AI, WR1, Fall-W. North
104. Drunks and Teetotalers: Alcohol and American Society From colonial times on, the use and abuse of alcohol in the United States has been hotly debated. This course examines historians' attempts to understand alcohol's powerful impact on American politics, society, social reform, and the history of medicine. Using original source materials, this course will focus on the temperance movement, the rise of saloons and saloon politics, the debate over prohibition, and the contemporary debates about substance abuse, Alcoholics Anonymous, and MADD (Mothers Against Drunk Drivers). 6 credits, Al, WR1, Fall-C. Clark
105. American Antebellum Slavery: History and Historians This seminar focuses on the nature of the antebellum slave experience as one of the great debates in American historiography. The course begins with Ulrich Bonnell Phillips's controversial 1918 interpretation and moves to selected major revisionist studies from the late 1950s through the 1990s that incorporate fresh scholarship on women, culture, and economics. There is emphasis on sharpening critical thinking and writing skills. 6 credits, AI, WR1, Fall-H. Williams
106. Carleton in the Archives: Studies in Institutional Memory Ours is a world of institutions--schools, corporations, government agencies--that shape the way we act, think, and remember. The memory of institutions themselves, the records they keep and the way these repositories are organized and used is crucial for their function and survival. What is the relationship between "official" and "individual" memory in the making of an institutional world? We will explore this and related questions through readings, discussion, and a hands-
on project based on material in Carleton's own archives. 3 credits, HI, Not offered in 2013-2014-P.

## Petzschmann

120. Rethinking the American Experience: American 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, HI, IDS, QRE, Not offered in 2013-2014
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, Not offered in 20132014
122. 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
123. 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
124. 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 African-American and Euro-American dilemma in the antebellum period. 6 credits, HU, WR, RAD; HI, WR2, IDS, Offered in alternate years, Fall-H. Williams
125. 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, WR, RAD; HI, WR2, Winter-H. Williams
126. Saints, Sinners, and Philosophers in Late Antiquity In Late Antiquity, pagans and Christians asked with particular intensity: How should I live? Those answering these questions successfully could become figures of authority and influence in their worlds. In this course we will explore what roles education; gender; discipline of the mind and body; physical location and social status; and acts of power played in the making of an exemplary life. Was the best life to be achieved through material renunciation, psychological transformation, or both? What institutional forms fostered such a life? We will ask these and other questions of a wide array of primary sources while employing the insights of modern scholarship. 6 credits, HI, WR2, IS, Offered in alternate years, Not offered in 2013-2014
127. Early Medieval Worlds Through the intensive exploration of four "worlds" in the early Middle Ages (Late Antique Italy, Anglo-Saxon England, Carolingian Europe, the Holy Roman Empire) this course seeks to offer an introduction to formative political, social, and cultural developments in Europe between c. 250 and c.1050s. Particular attention will be paid to the sources of our knowledge of early medieval people and polities. Development of a student-designed public exhibition on early medieval books and scribal culture will be an essential element of the course. 6 credits, HU, WR; HI, WR2, IS, Offered in alternate years, Not offered in 20132014
128. Crusades, Mission, and the Expansion of Europe This course examines the complex and sometimes
contradictory roles of crusade and mission in the gradual expansion of Europe (eleventh -fifteenth century) into the eastern Mediterranean, the Iberian peninsula, the Baltic, and even Central Asia. We will examine questions like: What did "crusade" or "mission" mean? How did people respond to, resist, or co-opt these enterprises? Did crusade and mission expand Europeans' knowledge of other cultures? In addition to critical analysis of primary sources and current scholarship, the course will offer opportunities to share knowledge with a broader public. 6 credits, HU, WR; HI, WR2, IS, Spring-V. Morse
129. 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 20132014
130. The Age of Revolutions: Modern Europe, 1789-1914 This course traces the evolution of Europe from the French Revolution to the outbreak of World War I, and examines some of the political, social, economic, intellectual, and cultural forces that have shaped and reshaped European society. We will cover the growth of modern nation-states, the industrial revolution and its effects on society, changes in the family and gender roles, and the evolution of modern consciousness in the arts, literature, and philosophy. The course will strive to look at both Western and Eastern Europe, and will conclude with a close examination of the causes of the First World War. 6 credits, HI, IS, Offered in alternate years, Winter-D. Tompkins
131. Europe in the Twentieth Century This course explores developments in European history in a global context from the final decade of the nineteenth century through to the present. We will focus on the impact of nationalism, war, and revolution on the everyday experiences of women and men, and also look more broadly on the chaotic economic, political, social, and cultural life of the period. Of particular interest will be the rise of fascism and communism, and the challenge to Western-style liberal democracy, followed by the Cold War and communism's collapse near the end of the century. 6 credits, HU; HI, IS, Not offered in 2013-2014
132. History of Early China At what point can we talk about the formation of China as an organized political entity? What did it mean to be a Chinese at different points in time? This course is an introduction to the history of China from its beginnings to the end of the Han dynasty in 220 . Students will examine the emergence of philosophical debates on human nature, historical consciousness of time and recording, and ritual theories in formation. Students will focus on the interplay between statecraft and religion, between ethnicity and identity, and between intellectual (e.g., Confucianism) and socio-cultural history (e.g., feminine and popular mentalities). 6 credits, HU, WR, RAD; HI, WR2, IS, Not offered in 2013-2014
133. History of Modern China This course offers a critical survey of the modern transformation of the trajectory of China's recent past spanning from the eighteenth century through the present. Students will analyze deep structural issues that cut across political narratives of Chinese elites. Themes for discussion will include the debates on Chinese "capitalism," new religious currents as a form of legitimation (e.g., Tibetan Buddhism), bureaucratic behaviors, cultural refinements, peasant and sectarian rebellions, the interaction with the West, the (non-)existence of civil society, nationalism, party politics, the dynamics of Communist rule, and alternative Chinese societies both inside and outside of Mainland China. 6 credits, HU, WR, RAD; HI, WR2, IS, Not offered in 2013-2014
134. History of Modern Korea A comparative historical survey on the development of Korean society and culture from the nineteenth century to the present. Key themes include colonialism and war, economic growth, political transformation, socio-cultural changes, and historical memory. Issues involving divided Korea will be examined in the contexts of post-colonialism and Cold War. Students are also expected to develop skills to analyze key historical moments from relevant primary sources against broader historiographical contexts. 6 credits, HU, RAD; HI, IS, Winter-S. Yoon
135. Urban Hisotry in Beijing and Beyond Program: City Planning and Daily Life in China and Korea What does it mean to build a city in China and Korea? Who were the city planners in these countries? How did they envision and design a city architecturally? Does it make any difference if an urban designer is a foreigner? In this course, guest speakers will introduce students to major issues--theoretical and practical--concerned with the study of cities as a historical category. A variety of local specialists--ranging from city planners to urban historians--will share their expertise on various phases of urban development: surveying and mapping; designing; legal and social boundary setting; and planning and landscaping. 6 credits, ND; HI, IS, Offered in alternate years, Spring-S. Yoon
136. History of Modern India, c. 1700-1047 A survey of the modern history of the Indian sub-continent from
the establishment of the Mughal Court in North India (1525 AD) until the formation of the Republic of India (1947 AD), including the regional states, the British East India Company, British colonial rule and the rise of nationalism. Students will be asked to consider the differences between the early modern and colonial periods, and the empires of the subcontinent. 6 credits, HU, RAD; HI, IS, Fall—Amna Khalid
137. Islam and Muslims in the Modern World This course provides a basic introduction to the history of the wider Muslim world from the eighteenth century to the present. We will discuss the cultural and religious diversity of the Muslim world and its varied interactions with modernity. We will find that the history of the Muslim world is inextricably linked to that of its neighbors, and we will encounter colonialism, anti-colonialism, nationalism, and socialism, as well as a variety of different Islamic movements. 6 credits, HU, RAD; HI, IS, Offered in alternate years, Spring-Adeeb Khalid
138. History of Modern South Asia 1947-Onward This course examines the history of South Asia from 1947 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 consider the following countries: India, Pakistan, Bangladesh and Sri Lanka. Topics covered will include political violence and non-violence, the rise of communalism, conceptions of masculinity and femininity, caste class, uses of national history. 6 credits, HU, WR, RAD; HI, WR2, IS, Spring-Amna Khalid
139. 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 2013-2014
140. 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, Spring-T. Feinstein
141. 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 2013-2014
142. 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, HU; HI, IS, Offered in alternate years, Not offered in 2013-2014
143. Living in the Colonial Context: Africa, 1850-1950 This course considers major actors and developments in sub-Saharan Africa from the mid-nineteenth through the mid-twentieth centuries. With a critical awareness of the ways that Africa's past has been narrated, it balances coverage of the state and economy with attention to daily life, families, and popular culture. The majority of the reading assignments are drawn from contemporary documents, commentaries, interviews, and memoirs. These are supplemented by works produced by historians. Students will analyze change, question perspectives, and imagine life during the age of European imperialism. Written assignments include a book review, examinations, and identifying and editing a primary source text. 6 credits, HI, IS, Spring-N. Jacobs
144. History of Early West Africa This course surveys the history of West Africa during the pre-colonial 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, HU, RAD; HI, IS, Offered in alternate years, Not offered in 2013-2014
145. 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, Not offered in 2013-2014
146. Rome Program: Power and Piety in Medieval Rome, 300-1150 This course will examine the ways in which city of Rome and its environs was transformed from the capital of a pagan empire into a center of Christian pilgrimage and culture and ultimately into the pinnacle of ecclesiastical power in the medieval West. We will pay particular attention to the expression of these changes in the form and functions of the City's buildings and urban fabric as well as examine influential contemporary developments and models in other regions of Italy such as Ravenna and Sicily. 6 credits, HU; HI, IS, Not offered in 2013-2014
147. Iconoclasm in the Early Middle Ages 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 power structures, 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 the theory and practice of iconoclasm in Byzantium, early Islam, and the early medieval West. 3 credits, HU ; HI, IS, Offered in alternate years, Not offered in 2013-2014
148. Papacy, Church and Empire in the Age of Reform Over the course of the eleventh century, 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, Offered in alternate years, Not offered in 2013-2014
149. 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 2013-2014
150. 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, Fall-G. Vrtis
151. Rome Program: Eternal City in Time: Urban Structure and Change This course will explore the lived experience of the city of Rome in the twelfth through sixteenth centuries. We will study buildings, urban forms, surviving artifacts, and textual evidence to understand how politics, power, and religion mapped onto city spaces, how daily life was shaped by urban challenges and opportunities, how the urban and rural environments interacted. Students will work on projects closely tied to the city fabric, in addition to completing reading and writing assignments and participating in discussions. 6 credits, HU, WR; HI, WR2, IS, Not offered in 2013-2014
152. Rome Program: A Roman Journal: Travelers' Accounts as Source and Experience Travel narratives are vital sources of information about historical and artistic monuments, social and cultural practices, and
experience larger impressions of people and place. Using a selection of historical travel narratives concerned with Rome and Italy, we will explore the potential and pitfalls of travel accounts as historical evidence. Students will also experience the intellectual and experiential challenges and opportunities of travel writing by constructing their own travel accounts. 3 credits, HU; HI, IS, Not offered in 2013-2014
153. 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, HU; HI, IS, Fall-S. Zabin
154. 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, HU; HI, IDS, Not offered in 2013-2014
155. 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, Winter-S. Zabin
156. The Age of Jefferson This course will examine the social, political and cultural history of the period 17831830 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, IDS, Spring-S. Zabin
157. Rethinking the American Civil War The Civil War, in which more than 620,000 died, was a cataclysmic event that reshaped American life. Using both original sources and the most recent scholarship, we will explore the causes, leadership, battles, and consequences of the war for ordinary Americans. Topics include the war's impact on men, women, slavery, legal rights, the economy, the confederacy, the presidency, and American memory. Special attention will be paid to Civil War photography, the problems of mapping the conflict, and the attempt to understand the war through modern movies and documentaries, including those of Ken Burns. 6 credits, HU, RAD; HI, IDS, Fall-C. Clark
158. History: Beyond the Walls This course will examine the world of history outside the walls of academia. Looking at secondary-school education, museums, and public policy, we will explore the ways in which both general and specialized publics learn and think about history. A central component of the course will be a civic engagement project mentoring sixth grade students at the Northfield Middle School as they research and produce projects for Minnesota History Day. Prerequisite: One History class. 6 credits, HI, WR2, Winter-S. Zabin
159. 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, HU, WR; HI, WR2, Not offered in 2013-2014
160. Is Obama Black?: American Mixed Race History This course explores the historical political, social, philosophical, and cultural problems related to mixed-race identity since the late nineteenth century, with emphasis on the U.S. government's 2000 decision allowing Americans to define their racial makeup as one race or more. Life stories, literature, and film investigate identity formation, stratification based on race, and the particular ways mixed-raced people articulate their identities in various contexts. Final projects beyond black and white mixed-race people encouraged. 6 credits, HI, WR2, IDS, Offered in alternate years, Spring-H.

## Williams

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, HU; HI, Not offered in 2013-2014
227. History of the American West Somewhere on the sunset-side of the Mississippi River, the American West begins. It is a region steeped in nostalgia and freighted with longings that Americans have now cherished for many generations. It is also a place as complex and tangled in dynamic cultural, social, political, and environmental forces as any place on earth. Among the themes we will examine are relationships among Native American and Euro-American peoples, the transition from imperial frontier to American territory, the shaping power of economic and cultural initiatives, and the centrality of nature and environmental change in forging our western past and present. 6 credits, HI, IDS, Offered in alternate years, Spring-G. Vrtis
228. History of U.S. Civil Rights and Black Power This course treats the struggle for racial justice from World War II through the 1960s. Histories, journalism, music, and visual media illustrate black and white elites and grassroots people allied in this momentous epoch that ranges from a southern integrationist vision to northern Black Power militancy. The segregationist response to black freedom completes the study. 6 credits, WR; HI , WR2, IDS, Offered in alternate years, Spring-H. Williams
229. Working with Gender 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, $H U, R A D ; H I, I D S$, Offered in alternate years, Spring-A. Igra
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 2013-2014
231. Mapping the World Before Mercator This course will explore early maps primarily in medieval and early modern Europe. After an introduction to the rhetoric of maps and world cartography, we will examine the functions and forms of medieval European and Islamic maps and then look closely at the continuities and transformations in map-making during the period of European exploration. The focus of the course will be on understanding each map within its own cultural context and how maps can be used to answer historical questions. We will work closely with the maps in Gould Library Special Collections to expand campus awareness of the collection. 6 credits, WR; HI, WR2, IS, QRE, Offered in alternate years, Winter-V. Morse
232. Renaissance Worlds in France and Italy Enthusiasm, artistry, invention, exploration.... How do these notions of Renaissance culture play out in sources from the period? Using a range of evidence (historical, literary, and visual) from Italy and France in the fourteenth-sixteenth centuries we will explore selected issues of the period, including debates about the meaning of being human and ideal forms of government and education; the nature of God and mankind's duties toward the divine; the family and gender roles; definitions of beauty and the goals of artistic achievement; accumulation of wealth; and exploration of new worlds and encounters with other peoples. 6 credits, HU, WR; HI, WR2, IS, Offered in alternate years, Fall-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 History 131 or 204 will be useful preparation. 6 credits, HU, RAD; HI, IS, Not offered in 2013-2014
234. 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 credits, HU, WR; HI, WR2, IS, Not offered in 2013-2014
235. 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 2013-2014
236. 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, $H U, W R ; H I, W R 2, I S, Q R E$, Not offered in 2013-2014
237. 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 2013-2014
238. 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, Winter—Adeeb Khalid
239. Communism, Cold War, Collapse: Russia Since Stalin In this course we will explore the history of Russia and other former Soviet states in the period after the death of Stalin, exploring the workings of the communist system and the challenges it faced internally and internationally. We will investigate the nature of the late Soviet state and look at 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 2013-2014
240. 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 2013-2014
241. Ireland: Land, Conflict and Memory This course explores the history of Ireland from Medieval times through the Great Famine, ending with a look at the Partition of Ireland in 1920. We examine themes of religious and cultural conflict and explore a series of English political and military interventions. Throughout the course, we will analyze views of the Irish landscape, landholding patterns, and health and welfare issues. Finally, we explore the contested nature of history and memory as the class discusses monuments and memory production in Irish public spaces. 6 credits, HU, WR; HI, WR2, IS, QRE, Offered in alternate years, Fall-S. Ottaway
242. 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 2013-2014
243. Two Centuries of Tumult: 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, $\mathrm{HU} ; \mathrm{HI}, \mathrm{IS}, \mathrm{Not}$ offered in 2013-2014
244. 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, Winter-D. Tompkins
245. History of Chinese Capitalism Is the twenty-first-century world economy that of China's? Were the last two centuries an aberration in the longstanding patterns of economic development in China? This course surveys current trends in scholarship on the economic, business, and financial history of China in its recent past. In terms of approaches, we will examine the exchanges between the "optimist" and "pessimist" perspectives before we consider the "Great Divergence" debate that cut across China and Europe. Thematically, we will cover China's early integration with world markets, technological lock-in, joint stock enterprise, as well as the evolving interplays between agricultural productivity, ecology, and demography. 6 credits, WR; HI, WR2, IS, Not offered in 2013-2014
246. China and Its Neighbors, ca. 1200-1800 China as we know today has been ruled over by diverse groups of peoples who crisscrossed the boundaries between the steppe and sown fields. By taking a comparative historical approach, this course purports to relate Chinese history from ca. 1200 to ca. 1800 to its worldhistorical context. Students will examine various approaches to this topic, including the strategic cultures, the Altaic, and more recent colonialism model. Themes include the discursive construction of cultural and ethnic identities, multiple notions of frontiers (e.g., linear, zonal, layered), and alternative ways of constructing sovereignty claims distinct from that of the Westphalia System. 6 credits, HU, WR, RAD; HI, WR2, IS, Offered in alternate years, Not offered in 2013-2014
247. 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 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, WR; HI, WR2, IS, Not offered in 2013-2014
248. Print Culture and Nationalism in East Asia Has a public sphere ever existed in East Asia? Is there freedom of the press in East Asian history? To some, these questions may sound counter-intuitive in that the book industry and a reading public emerged much earlier in the region than any other parts in the world. This course will examine how printing and press-like activities shaped national consciousness in China, Japan, and Korea. Students will analyze communication circuits that linked authors, journalists, shippers, booksellers, itinerant storytellers, gossipers, listeners, and active readers. Sources will be drawn from poems, private letters, maps, pamphlets, handbills, local gazetteers, rumor mills, pictorials, and cartoons. 6 credits, $H U, W R, R A D ; H I$, WR2, IS, Not offered in 2013-2014
249. History of Urban China Who initiated the circulation of new ideas and novel communicative behaviors in urban China? Is there anything Chinese about the "public" forged in Chinese cities? This course adopts a comparative and integrative approach to examine the studies of major ritual centers (e.g., Beijing), market towns, and foreign concessions (e.g., Shanghai). Thematically, students will analyze the ongoing tension between time and place as expressed in the conflict between China's colonial past and its search for national identity. This course is open to all those interested, while it is pitched mainly for those who will participate in the Urban History Seminar in Beijing. 6 credits, HU, WR, RAD; HI, WR2, IS, Offered in alternate years, Winter-S. Yoon
250. Urban History in Beijing and Beyond Program: History of Urban China and Korea In this course students will develop a mode of historical thinking with which to historicize the urban planning traditions as
competing powers sought to transform both physical and human landscapes over time. Students will analyze the material topologies and epistemological underpinnings of particular aspects of the cities in question as they appear in sample primary sources. For example, in Mongolian Beijing, students will scrutinize excerpts from a historical fiction based on imaginary dialogues between Kublai Khan and Marco Polo and before visiting colonial Seoul, students will compare different plans prepared by the Germans, Japanese, and Korean designers. 6 credits, ND; HI, IS, Offered in alternate years, Spring-S. Yoon
251. 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 consider the role and position of European women in India. Readings will include stories and memoirs from the colonial and post-colonial period. Representations of both European and Indian women in Indian and European cinema will also be examined. 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, Winter-Amna Khalid
252. 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, Fall-Adeeb Khalid
253. Public Health: History, Policy, and Practice This course will examine the rise of the institution of public health in the modern period. Locating public health within the social history of medicine we will consider how concepts of health and disease have changed over time and how the modern state's concern with the health of its population cannot be separated from its need to survey, police, and discipline the public. Topics covered will include miasma, contagion, quarantine, vaccination and the connection between European imperialism and the institutionalization of public health in colonial contexts. We will also consider how certain epidemics became the major drivers for public health. 6 credits, HI, WR2, IS, Spring-Amna Khalid
254. Disease, Medicine and Empire This course explores the social history of disease and medicine in the context of the British Empire. We will consider the colonial experience in Africa and India and focus on medical encounters, the role of medicine and disease in hindering and/or facilitating imperial expansion and control, the interaction between western medicine and indigenous systems of healing, the role of medicine in the construction of race and difference, and the rise of western medical education and institutions in the colonies. 6 credits, HU; HI, IS, Offered in alternate years, Not offered in 2013-2014
255. 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, Spring-Adeeb Khalid
256. 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 socio-political movements which emerged among Muslim communities in the colonial and post-colonial eras. 6 credits, HU; HI, IS, Not offered in 2013-2014
257. The Indian Ocean World in the Age of European Expansion Five years after Columbus's voyage to the New World, Vasco Da Gama navigated his way to the real Indies. The advent of Europeans in the Indian Ocean had a gradual but significant impact on trade and the balance of power in the Indian Ocean world. We will examine how the growing influence of the Portuguese, the Dutch and finally the British influenced not only trading patterns but also the interactions between the littoral regions and communities. Topics covered include commodities and markets; slavery, forced labor and pilgrims; diasporic communities and the challenges of assimilation; and port cities as disease frontiers. 6 credits, HU; HI, IS, Not offered in 2013-2014
258. Political Violence and Human Rights in Latin America Rooted in earlier social struggles and influenced by the advent of the Cold War, political violence and war pervaded the Latin American landscape throughout the latter half of the twentieth century. This violence impacted political horizons, social relations, cultural
representations, and the very memory of those who lived through this era. This course explores three different genres of violence through in-depth case studies: Southern Cone dirty wars (Argentina); Central American civil wars (Guatemala) and Andean civil wars (Peru). Writing assignments will involve multiple forms of analysis, while challenging students to think comparatively about the different case studies. 6 credits, WR; HI, WR2, IS, Spring-T. Feinstein
259. The Mexican Revolution The first major revolution of the twentieth century, the Mexican Revolution of 1910 exerted a profound and enduring influence that extended well beyond the nation's borders. This course begins with an examination of the historical origins of the conflict before delving into both its domestic and international dimensions. The second half of the term focuses on the emergence of an authoritarian postrevolutionary state, its efforts to transform the nation's economy, society and culture, as well as the challenges these projects generated among grassroots movements and political, artistic, and intellectual dissidents. 6 credits, HU; HI, IS, Offered in alternate years, Not offered in 2013-2014
260. 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, WR2, IS, Winter-A. Fisher
261. 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, HU, RAD; HI, IS, QRE, Not offered in 2013-2014
262. The Spanish Inquisition The Inquisition was the Spanish crown's principal tool for combating heterodoxy and deviance. This course examines the Tribunal's campaigns to eradicate religious, cultural, racial, sexual, and political sources of contagion in both Spain and the New World. Through the prism of its sources, including the interrogations and confessions of the accused, we will study the Inquisition's prosecution of a range of alleged crimes, including relapsed conversion (of Jews, Muslims and Indians), witchcraft, diabolism, homosexuality, and female mysticism. Particular care will be given to the methodological challenges involved in using inquisition sources for the study of popular culture and religion. 6 credits, HU ; HI, IS, Offered in alternate years, Not offered in 2013-2014
263. 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 2013-2014
264. African in the Arab World This course is part of the off-campus winter break program, involving two linked courses in fall and winter terms. This course is the first class in the sequence. This course examines African people's existence as religious, political, and military leaders, and as slaves and poets in Arab societies from ancient to modern times. It also interrogates the experiences of men as eunuchs, and of women as concubines and wives. Beginning with the pre-Islamic era, it highlights the movement of Africans from the Sahara Desert to the Nile valley, from the Red Sea to the Indian Ocean. It traces the experiences of peoples whose dark skin became equated with slave status (and the legacy of slavery) even as they became loyal followers of Islam in the Arab world. 6 credits, HU, WR, RAD; HI, WR2, IS, Offered in alternate years, Not offered in 2013-2014
265. War in Modern Africa This course examines the Nigerian Civil War, also known as the Biafra War, 19671970, 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, Not offered in 20132014
266. Masquerades in Africa This course explores the relevance of masks, animated in masquerade performances, to the practice of reconstructing the African past. Students learn (1) how the peoples of Africa have performed masquerades to both record and reenact the past; (2) how nineteenth- and twentieth-century explorers and ethnographers have described masks and masquerades; (3) how various elements of these performances offer evidence from which scholars can reconstruct the past; and (4) how to identify and interpret the paradigms and politics that inform the production of both the masks themselves and the ethnographic accounts of their significance in African culture. 6 credits, HU, RAD; HI, IS, Offered in alternate years, Not offered in 2013-2014
267. Crafting a History of Africa Since Independence The course begins as Europe's African empire unraveled, and ends with a look toward the future. Students engage in this history while joining the professor in the project of compiling a textbook collection of primary sources. The course is organized thematically into units. Each begins with research on and critical discussion of a broad topic considered within specific historical contexts. Students will identify, edit, and comment on primary sources that represent these major developments and themes. The class will assemble their collection into a narrative collage consisting of official documents, political commentaries, interviews, memoirs, transcripts, and visual records. 6 credits, HI, IS, Spring-N. Jacobs
268. Museums, Monuments, and Memory "History" is not just the name of a department at Carleton College; "History-making" is an activity engaged in by everybody, everyday. We watch historical movies, listen to political leaders invoking history in making policy, tour historic sites and museums, etc. We listen to our elders tell us stories about their lives, and we tell ourselves stories that place our experiences into the historical continuum. This course ranges widely over the varied and sometimes risky terrain of contemporary history-making in Minnesota and beyond to examine preservation organizations, museums, archives, oral history projects, documentary films, historic sites, schools, theater, TV, and cyberspace. 3 credits, HU; HI, IDS, Not offered in 2013-2014
269. Africans in the Arab World: On Site and Revisited This course is the second part of a two-term sequence. It begins with a two-week December-break trip to Dubai, UAE, to visit museums, mosques, other heritage sites, universities, media outlets, and markets. It promotes dialogue with Afro-Arab women around the historical constructions of gender, race, and ethnicity in heritage sites, Islam, Arab media, academic institutions, and popular culture. Ultimately, students will ponder Afro-Arab women's voice and visibility beyond the home in this Arab society. Then upon return to Carleton, students will reflect upon their experiences in the UAE, analyze their data, and present it in oral, written, and visual formats. Prerequisite: History 280. 6 credits, HU, RAD; HI, IS, Not offered in 2013-2014
270. Urban History in Beijing and Beyond Program: Directed Reading: Approaches to Chinese Cities This is a self-directed course during spring break when participants will read selected works to cover certain persistent themes that cut across evolving patterns of Chinese (and Korean) cities they will visit. Students will write an interpretive essay on the common readings of their choice prior to departure and discuss it with other participants during the first week of the program. 2 credits, S/CR/NC, ND; NE, Spring-S. Yoon
271. Urban History in Beijing and Beyond Program: Individual Research: Mapping Chinese and Korean Cities Students will conduct individual projects to reflect upon the evolving meaning of a particular place. With the overriding question of the ultimate meaning of "home," students will reconstruct a visible face of a particular aspect of the cities they visit on a street-level. They will re-map a section of the city with a focus on one aspect of urban narratives chosen from the common readings. Students will draw maps, sketches, or write journals on historic buildings and monuments; streets; public recreation centers; commercial districts; public infrastructure; and pedestrians. Interviews with local historians and urban planners will also be conducted. 4 credits, ND; NE, IS, Offered in alternate years, Spring-S. Yoon
272. 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-Adeeb Khalid, H.

## Williams

306. American Wilderness This course is part of the off-campus spring break program, involving two-linked
courses in winter and spring. 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 205 or consent of instructor. 6 credits, HU, WR; HI, WR2, IDS, Offered in alternate years, Winter-G. Vrtis
307. Wilderness Field Studies: Grand Canyon This course is the second half of a two-course sequence focused on the study of wilderness in American society and culture. The course will begin with a two-week offcampus study program during spring break at the Grand Canyon, where we will learn about the natural and human history of the Grand Canyon, examine contemporary issues facing the park, meet with officials from the National Park Service and other local experts, conduct research, and experience the park though hiking and camping. The course will culminate in the spring term with the completion and presentation of a major research project. Prerequisite: History 306. 6 credits, HU, WR; HI, WR2, IDS, Spring-G. Vrtis
308. American Cities and Nature Since the nation's founding, the percentage of Americans living in cities has risen nearly sixteenfold, from about $5 \%$ to the current $79 \%$. This massive change has spawned legions of others, and all of them have bearing on the complex ways that American cities and city-dwellers have shaped and reshaped the natural world. This course will consider the nature of cities in American history, giving particular attention to the dynamic linkages binding these cultural epicenters to ecological communities, environmental forces and resource flows, to eco-politics and social values, and to those seemingly far-away places we call farms and wilderness. Prerequisite: History 205 or permission of the instructor. 6 credits, HU , WR; HI, WR2, IDS, Offered in alternate years, Not offered in 2013-2014
309. Civil Rights and Black Power This seminar treats the struggle for racial justice from World War II through the 1960s. Histories, journalism, music, and visual media illustrate black and white elites and grassroots people allied in this momentous epoch that ranges from a southern integrationist vision to northern Black Power militancy. The segregationist response to black freedom completes the study. Research project on twenty-first century Minnesota hate groups. 6 credits, HU, RAD; HI, IDS, Offered in alternate years, Not offered in 20132014
310. 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, HU; HI, Not offered in 2013-2014
311. 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, Fall-D. Tompkins
312. The Global Cold War In the aftermath of the Second World War and through the 1980s, the United States and the Soviet Union competed for world dominance. This Cold War spawned hot wars, as well as a cultural and economic struggle for influence all over the globe. This course will look at the experience of the Cold War from the perspective of its two main adversaries, the U.S. and USSR, but will also devote considerable attention to South America, Asia, Africa, and the Middle East. 6 credits, HI, IS, Offered in alternate years, Spring-D. Tompkins
313. 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, HU, WR, RAD; HI, WR2, IS, Not offered in 20132014
314. Feathered Serpents, Flower-Songs, and Water Mountains: In Search of the World of the Aztecs This course examines the indigenous cultures and societies of Mexico before and after the Spanish conquest. In addition to the assigned reading, students will be provided hands-on experience working with an array of sources produced by indigenous authors and artists. This rich corpus of material includes: ritual calendars, maps, songs and poems, land deeds, dynastic annals and chronicles, town council records, church murals, and wills and testaments. The college's collection of Mesoamerican codices will play a prominent role in our
investigation. Students conclude the term with a presentation and write-up of a collaborative research project. 6 credits, HU, WR; HI, WR2, IS, Not offered in 2013-2014
315. 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? 6 credits, HU, RAD; HI, IS, Not offered in 2013-2014
316. History, Memory, and the Atlantic World: On Site and Revisited The first part of the seminar is a 15day 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, HI, IS, Not offered in 2013-2014
317. 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 2013-2014
318. Crime and Punishment: American Legal History, 1607-1865 Legal documents such as depositions, file papers, complaints, accusations, confessions, and laws themselves offer a fascinating window into American history. Such documents lend themselves to the study of Indian history, capitalism, family relationships, and slavery, to name only a few possible topics. This is an advanced research seminar in which students will write a 25-30 page paper based on original research. Participation in the seminar will also include some common readings that use a variety of approaches to legal history, and extensive peer reviews of research papers. 6 credits, HU, WR; HI, WR2, IDS, Offered in alternate years, Spring-S. Zabin
319. The Progressive Era? Was the Progressive Era progressive? It was a period of social reform, labor activism, and woman suffrage, but also of Jim Crow, corporate capitalism, and U.S. imperialism. These are among the topics that can be explored in research papers on this contradictory era. We will begin by reading a brief text that surveys the major subject areas and relevant historiography of the period. The course will center on the writing of a 25-30 page based on primary research, which will be read and critiqued by members of the seminar. 6 credits, HU; HI, Spring-A. Igra
320. Controversial Histories: Conflict, Polemic, and Persuasion in Historical Perspective This seminar explores the histories of how people in diverse times and places discussed, debated and decided the issues and ideals that shaped their lives, communities, and world. Particular attention will be paid to the role of institutions and individuals, networks, the forms and functions of polemical discourse, and the dynamics of group formation and stigmatization in the historical unfolding of conflict and consensus. Theoretical readings and select case studies from different historical contexts will provide the common readings for the seminar. Possible extra time required for end of term "mini-conference." 6 credits, HI, WR2, Fall—W. North
321. 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 well-written historical arguments within the context of an extended project of their own design. They also learn 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/CR/NC, HU, WR; HI, WR2, Winter-A. Igra
322. Integrative Exercise Required of all seniors majoring in history. Registration in this course is contingent upon prior approval of a research proposal. 6 credits, S/NC, 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/CR/NC, ND; NE, Summer-C. Davidson, S. Drew
100. Summer Quantitative Reasoning Institute The Summer Quantitative Reasoning Institute (SQRI) is a three-week intensive training in quantitative methods in the social sciences. Instruction is divided into week-long courses in political science/international relations, economics, and psychology. Students work on group research projects in their single core discipline under faculty direction. Study includes classroom work, lab work, and some field trips. For high school juniors and seniors. 6 credits, S/CR/NC, ND; NE, Summer-A. Montero,
A. Swoboda, J. Strand
101. 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, Al, WR1, QRE, Fall-N. Lutsky
102. Student Conversations about Diversity and Community In this course students participate in peer-led conversations about diversity and community at Carleton. Students complete readings and engage in experiential exercises that invite them to reflect on their own social identities and their attitudes toward race, gender, class, and sexuality. By taking risks and engaging in honest conversations and self-reflection, students work together to understand differences and to explore how to build communities that are welcoming and open to diversity. Students are required to keep a weekly journal that is graded by faculty members. Required application form may be downloaded from Dean of Student's web-page. 2 credits, S/CR/NC, ND; NE, WinterStaff
103. AI \& R: Art, Interactivity, and Robotics Wiggle, spin, buzz, whir-it's smart art, using robotic technology! In this hands-on seminar, we'll add a new twist to 3-D art by activating it with microprocessors. Imagine the fundamentals of computer science, sculpture, engineering, and aesthetic design all brought together in innovative, whimsical constructions. Students will engage the nuts-and-bolts of fabrication, learn to program computers, and get the insider's guide to the ways robots think. This collaborative lab will culminate in a campus wide exhibition. No prior experience is required--this course welcomes all students with artistic inclinations and light bulbs in their brains. Students who taken any combination of Studio Art 122, Computer Science 111, or higher numbered Computer Science courses are not eligible to enroll. Prerequisite: Students who taken any combination of Studio Art 122, Computer Science 111, or higher numbered Computer Science courses are not eligible to enroll. 6 credits, NE, Winter-S. Mohring, D. Musicant
104. 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/CR/NC, ND; NE, Fall, Winter, Spring-D. Gross
105. 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, $S / C R / N C, N D ; N E, F a l l$, Winter, Spring-A. Estill, W. North
106. Talking about Diversity This course prepares students to facilitate peer-led conversations about diversity. Students learn about categories and theories related to social identity, power, and inequality, and explore how race, gender, class, and sexual orientation 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. Participants in this class may apply to facilitate sections of IDSC 103, a 2-credit student-led course in winter term. Prerequisite: By application only. 4 credits, $S / C R / N C, N D ;$ NE, Fall-A. Estill
107. 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. This course is intended for students with at least one previous or concurrent introductory mathematics or natural science course. 6 credits, ND, WR; LA, WR2, QRE, Not offered in 2013-2014
108. Windows on the Good Life Human beings are always and everywhere challenged by the question: What should I do to spend my mortal time well? One way to approach this ultimate challenge is to explore some of the great cultural products of our civilization--works that are a delight to read for their wisdom and artfulness. This series of two-credit courses will explore a philosophical dialogue of Plato in the fall, a work from the Bible in the winter, and a pair of plays by Shakespeare in the spring. The course can be repeated for credit throughout the year and in subsequent years. 2 credits, S/CR/NC, HI, Fall-L. Cooper, A. Rubenstein
109. 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. 2 credits, S/CR/NC, ND; SI, Not offered in 2013-2014
110. Science Fellows Research Colloquium This colloquium develops the skills needed to engage in and communicate scientific and mathematical research. Topics will vary each term, but will include searching and reading the primary literature and communicating results orally and via posters. The colloquium will also explore the landscape of academic scientific research and how to negotiate the expectations of being a research group member. Prerequisite: Instructor permission required. 1 credits, S/CR/NC, ND; NE, Spring-M. Eblen-Zayas
111. Focus Sophomore Colloquium This colloquium is designed for sophomore students participating in the Focusing on Cultivating Scientists program. It will provide an opportunity to participate in STEM-based projects on campus and in the community. The topics of this project-based colloquium will vary each term. Prerequisite: Interdisciplinary Studies 198. 1 credits, S/CR/NC, NE, Fall, Winter, Spring-C Blaha

## INTERNATIONAL RELATIONS MAJOR

See Political Science.
JAPANESE
See Asian Languages and Literatures. JUDAIC STUDIES

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 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 2013-2014)
HEBR 223 Faith and Fiction: Exploring Israeli National Identity (Not offered in 2013-
HEBR 241 Israel in A. B. Yehoshua's Literature (Not offered in 2013-2014)
HEBR 291 and 391 Independent Study
MELA 230 Jewish Collective Memory
RELG 120 Introduction to Judaism
RELG 160 Hebrew Bible (Not offered in 2013-2014)
RELG 221 Sex, Jews and Gender (Not offered in 2013-2014)
RELG 222 State of Judaism in the State of Israel (Not offered in 2013-2014)
RELG 223 Research on Israel (Not offered in 2013-2014)
RELG 269 Jewish Ethics (Not offered in 2013-2014)
RELG 271 Religious and Moral Issues of Holocaust (Not offered in 2013-2014)
RELG 291 and 391 Independent Study
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 and Middle Eastern Languages

## LATIN AMERICAN STUDIES (LTAM)

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 crosscultural 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.

Students interested in exploring Latin American Studies as a possible major are strongly encouraged to enroll in at least one of several gateway courses early in their career at Carleton. Those designated courses are: History 170 Modern Latin America, Political Science 221 Latin American Politics, Sociology/Anthropology 250 Ethnography of Latin America, and Spanish 242 Introduction to Latin American Literature.

## 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 300 Issues in Latin American Studies
LTAM 400 Integrative Exercise
In addition, majors are required to complete: Two 300-level Latin America-focused
courses offered in the Spanish department. One 300-level history, or sociology/anthropology, or political science course focused on Latin America, and 30 additional credits of electives from the list below. The 300-level courses in the Spanish department that are required are always taught in the language.

Students are strongly encouraged to complete the non-Spanish 300-level 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 sociology and anthropology or political science course as an elective.

Up to 27 credits from work in approved off-campus programs may be counted as electives for the major. Credits in natural science courses taken in Latin America may be applied toward the electives requirement if the director approves. Up to twelve elective credits may be comparative or Latino in focus (American Studies 127, 226, 227, Economics 240, 241, Music 141, Politcal Science 233, Sociology/Anthropology 203, 233, 234, 259, 302). No more than four courses (twenty-four credits) in any one discipline may apply to the major.

## Latin American Studies Courses

100. The Politics of Memory in Latin American Literature We will explore the ethics and politics of memory and trauma in societies previously torn asunder by civil wars and dictatorships. The texts and films assigned will be studies of how subjective and collective memories are negotiated both through fictional and testimonial narratives. Our focus will be primarily on Argentina, Chile, Guatemala and El Salvador but we will also read some Holocaust literature to compare how this subject has been represented in another tradition. The primary question we will explore is:\ how does a work of art adequately represent the horror without aestheticizing the experience? 6 credits, WR; Al, WR1, IS, Fall-Y. Pérez
101. Portuguese for Spanish Speakers This fast-paced introductory Portuguese language course focuses on developing communication skills and emphasizes speaking, reading, and writing. Previous knowledge of Spanish is assumed in presentation of grammar and vocabulary. Prerequisite: Spanish 103 or permission of the instructor. 3 credits, S/CR/NC, ND; NE, Not offered in 2013-2014
102. Chile's September 11th: History and Memory since the Coup September 11, 2013 marks the fortieth anniversary of the coup 'e' tat that deposed the democratically elected government of socialist Salvador Allende and initiated the seventeen-year dictatorship of Augusto Pinochet. This interdisciplinary course canvasses this tumultuous period in Chilean history through the study of speeches and interviews from the era, testimonials, declassified U.S. security documents, literature, film, photographs, and music. It explores the Allende years, the domestic and international contexts of the coup, the dictatorship's "counterinsurgency" and neoliberal reform programs, protest movements against military rule, and the ongoing struggles over human rights, popular mobilization, and collective memory. 6 credits, ND, WR; HI, WR2, IS, Fall-A. Fisher
103. Issues in Latin American Studies This required course for Latin American Studies concentrators and majors explores complex issues pertinent to the study of Latin America. These issues may include the emergence of indigenous cosmopolitics in the Andean region, the workings of narco states and their networks, and the contemporary urban cultural production in major Latin American cities, among others. The course emphasizes the necessity of a multi-disciplinary and interdisciplinary research perspective for understanding the changing nature of Latin American Studies today. Designed by the faculty in Latin American Studies, the course will include regular guest lectures from among these faculty. Prerequisite: Any Latin American gateway course . 6 credits, SI, IS, Offered in alternate years, Spring-S. López
104. Peru Program: Current Issues in Development and Social Movements in Peru Although Peru has experienced a strong economic growth and increased political stability in recent years, some long-standing problems remain unresolved, in particular the improvement of social conditions for large segments of the population. While critically examining the terms "development" and "social inclusion" much used in current Peruvian politics to describe such situations, students' involvement in community service will provide concrete referents for class discussion. Classes are supplemented by visits to relevant sites and by lectures by local intellectuals. Prerequisite: Spanish 204 or equivalent. 6 credits, AL; SI, Spring-J. Cerna-Bazán
105. 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 2013-2014
106. 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 2013-2014
107. 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
108. 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/NC, ND, Fall, Winter, Spring-J. Cerna-Bazán, S. López, A. Montero

## Other Courses Pertinent to Latin American Studies

AMST 127 Introduction to U.S. Latino/a Studies (Not offered in 2013-2014)
AMST 226 Latinas in Hollywood (Not offered in 2013-2014)
AMST 227 Beyond the Border: Latinos Across America (Not offered in 2013-2014)
ECON 240 Microeconomics of Development
ECON 241 Growth and Development (Not offered in 2013-2014)
ENGL 119 Introduction to U.S. Latino/a Literature (Not offered in 2013-2014)
HIST 169 Colonial Latin America 1492-1810 (Not offered in 2013-2014)
HIST 170 Modern Latin America 1810-Present
HIST 272 The Mexican Revolution (Not offered in 2013-2014)
HIST 273 Go-Betweens and Rebels in the Andean World
HIST 276 The African Diaspora in Latin America (Not offered in 2013-2014)
HIST 278 The Spanish Inquisition (Not offered in 2013-2014)
MUSC 141 Global Popular Music
MUSC 243 Musical Cultures of the Caribbean (Not offered in 2013-2014)
POSC 221 Latin American Politics (Not offered in 2013-2014)
POSC 322 Neoliberalism and the New Left in Latin America*
SOAN 203 Anthropology of Good Intentions
SOAN 233 Anthropology of Food
SOAN 234 Ecology, Economy, and Culture (Not offered in 2013-2014)
SOAN 241 Guatemala Program: Mesoamerican Cultures
SOAN 251 Guatemala Prog: Resource Mgmt, Community Develpmnt \& Soc Change in Guatemala \& Chiapas
SOAN 259 Comparative Issues in Native North America
SOAN 295 Guatemala Program: Field Methods and Individual Research Project
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2013-2014)

SPAN 207 Exploring Hispanic Culture (Not offered in 2013-2014)
SPAN 220 Magical Realism in Latin American Narrative (Not offered in 2013-2014)
SPAN 222 Two Voices: Gabriel García Márquez and Laura Restrepo
SPAN 242 Introduction to Latin American Literature
SPAN 255 Women Dramatists in Latin America: Staging Conflicts (Not offered in 20132014)

SPAN 260 Forces of Nature
SPAN 262 Myth and History in Central American Literature (Not offered in 2013-2014)
SPAN 263 History of Human Rights (Not offered in 2013-2014)
SPAN 266 Postwar Central American Llterature
SPAN 269 Peru Program: Diversity, Conflict and Culture in Peru
SPAN 277 The Poem as Artifact: Art and Work in Contemporary Spanish American Poetry
SPAN 321 Murder as a Fine Art: The Detective Novel in Latin America
SPAN 330 The Invention of the Modern Novel: Cervantes' Don Quijote (Not offered in 2013-2014)
SPAN 336 Genealogies of the Modern: Turn of the Century Latin America (Not offered in 2013-2014)
SPAN 342 Latin American Theater: Nation, Power, Gender (Not offered in 2013-2014)
SPAN 350 Recent Trends in Latin American Narrative: Pop Culture and Testimony (Not offered in 2013-2014)
SPAN 358 The Spanish Civil War (Not offered in 2013-2014)
SPAN 360 Race and Nation in Caribbean Literature (Not offered in 2013-2014)
SPAN 366 Jorge Luis Borges: Less a Man Than a Vast and Complex Literature
SPAN 371 Yours Truly: The Body of the Letter (Not offered in 2013-2014)

## LATIN AMERICAN STUDIES CONCENTRATION

<a href="https://apps.carleton.edu/curricular/Itam/faculty/">Browse faculty and Staff</a>
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 history, sociology and anthropology, literature and film in the Spanish department, political science, as well as other disciplines, culminating in a capstone experience, the Latin American Forum.

Students interested in exploring Latin American Studies as a possible concentration are strongly encouraged to enroll in at least one of several gateway courses early in their career at Carleton. Those designated courses are: History 170 Modern Latin America, Political Science 221 Latin American Politics, Sociology/Anthropology 250 Ethnography of Latin America, and Spanish 242 Introduction to Latin American Literature.

## 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:
SOAN 250 Ethnography of Latin America (Not offered in 2012-2013)
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 the first list and twelve from second. 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 elective credits may be comparative or Latino in focus (American Studies 127, 226, 227, Economics 240, 241, Music 141, Politcal Science 233, Sociology/Anthropology 203, 233, 234, 259 302). Up to 18 credits from approved off-campus programs may be counted as electives. Credits in natural science courses taken in Latin America may be applied toward the electives requirement if the director approves. In most cases they will count under the Group II list.

## Elective Courses:

Group I:
AMST 127 Introduction to U.S. Latino/a Studies (Not offered in 2013-2014)
AMST 226 Latinas in Hollywood (Not offered in 2013-2014)
AMST 227 Beyond the Border: Latinos Across America (Not offered in 2013-2014)
ENGL 119 Introduction to U.S. Latino/a Literature (Not offered in 2013-2014)
LTAM 100 The Politics of Memory in Latin American Literature
MUSC 141 Global Popular Music
MUSC 243 Musical Cultures of the Caribbean (Not offered in 2013-2014)
SPAN 207 Exploring Hispanic Culture (Not offered in 2013-2014)
SPAN 220 Magical Realism in Latin American Narrative (Not offered in 2013-2014)
SPAN 222 Two Voices: Gabriel García Márquez and Laura Restrepo
SPAN 242 Introduction to Latin American Literature
SPAN 255 Women Dramatists in Latin America: Staging Conflicts (Not offered in 20132014)

SPAN 260 Forces of Nature
SPAN 262 Myth and History in Central American Literature (Not offered in 2013-2014)
SPAN 263 History of Human Rights (Not offered in 2013-2014)
SPAN 266 Postwar Central American LIterature
SPAN 269 Peru Program: Diversity, Conflict and Culture in Peru
SPAN 277 The Poem as Artifact: Art and Work in Contemporary Spanish American Poetry
SPAN 321 Murder as a Fine Art: The Detective Novel in Latin America
SPAN 330 The Invention of the Modern Novel: Cervantes' Don Quijote (Not offered in 2013-2014)
SPAN 336 Genealogies of the Modern: Turn of the Century Latin America (Not offered in 2013-2014)
SPAN 342 Latin American Theater: Nation, Power, Gender (Not offered in 2013-2014)
SPAN 350 Recent Trends in Latin American Narrative: Pop Culture and Testimony (Not offered in 2013-2014)
SPAN 358 The Spanish Civil War (Not offered in 2013-2014)
SPAN 360 Race and Nation in Caribbean Literature (Not offered in 2013-2014)
SPAN 366 Jorge Luis Borges: Less a Man Than a Vast and Complex Literature
SPAN 371 Yours Truly: The Body of the Letter (Not offered in 2013-2014) Group II:

ECON 240 Microeconomics of Development
ECON 241 Growth and Development (Not offered in 2013-2014)
HIST 169 Colonial Latin America 1492-1810 (Not offered in 2013-2014)
HIST 170 Modern Latin America 1810-Present
HIST 272 The Mexican Revolution (Not offered in 2013-2014)
HIST 273 Go-Betweens and Rebels in the Andean World
HIST 276 The African Diaspora in Latin America (Not offered in 2013-2014)
HIST 278 The Spanish Inquisition (Not offered in 2013-2014)
LTAM 270 Chile's September 11th: History and Memory since the Coup
LTAM 365 Peru Program: Current Issues in Development and Social Movements in Peru
LTAM 370 Brazil Culture and Politics (Not offered in 2013-2014)
POSC 221 Latin American Politics (Not offered in 2013-2014)
POSC 322 Neoliberalism and the New Left in Latin America*
SOAN 203 Anthropology of Good Intentions
SOAN 233 Anthropology of Food
SOAN 234 Ecology, Economy, and Culture (Not offered in 2013-2014)
SOAN 241 Guatemala Program: Mesoamerican Cultures
SOAN 251 Guatemala Prog: Resource Mgmt, Community Develpmnt \& Soc Change in Guatemala \& Chiapas
SOAN 259 Comparative Issues in Native North America
SOAN 295 Guatemala Program: Field Methods and Individual Research Project
SOAN 302 Anthropology and Indigenous Rights (Not offered in 2013-2014)

## LINGUISTICS (LING)

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; 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 250, 265, 275, 280, 285, 286, Chinese 248, or Asian Languages 260. At most one drawn from: Asian Languages 111, Computer Science 254, 322, Philosophy 210, 223, 225, Psychology 234, 366, 375, Sociology/Anthropology 274.

## Linguistics Courses

110. 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
111. 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, Spring-D. Medeiros
112. Generative Approaches to Syntax This course has two primary goals: to provide participants with a forum to continue to develop their analytical skills (i.e. to 'do syntax'), and to acquaint them with generative syntactic theory, especially the Principles and Parameters approach. Participants will sharpen their technological acumen, through weekly problem solving, and engage in independent thinking and analysis, by means of formally proposing novel syntactic analyses for linguistic phenomena. By the conclusion of the course, participants will be prepared to read and critically evaluate primary literature couched within this theoretical framework. Prerequisite: Linguistics 115. 6 credits, SS; FSR, Winter-D. Medeiros
113. 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-A. Lubowicz
114. 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, Not offered in 2013-2014
115. Language and Discrimination From the cognitive perspective, knowledge of language depends on the ability, usually subconscious, to discriminate between linguistic categories (e.g. phonemes, morphemes, and others). But how does language users' ability to discriminate between linguistic categories affect linguistic ideologies in the social sphere? We examine how language interacts with (again, usually subconscious) ideological processes, taking a critical theory of race as our starting point. From there, we examine the central role of language in social statement, conflict, and discrimination as this relates to race, ethnicity, ability, homeland, gender, and the suppression of linguistic variation. Prerequisite: Any 100 level Linguistics course. 6 credits, SI, Winter-D. Medeiros
116. Linguistics and Literary Art This course examines approaches to the question: "How do artists who use language as a medium manipulate that medium, and to what effect?" Prerequisite: Linguistics 110 or permission of instructor. 6 credits, SS; LA, Not offered in 2013-2014
117. 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 2013-2014
118. 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, Not offered in 2013-2014
119. 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: Linguistics 110 or 115. . 6 credits, SS; LS, Spring-C. Fortin
120. Linguistics Seminar: 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-M. Flynn
121. Linguistics Seminar: 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-M. Flynn
122. Topics in Syntax More on syntax. Particular topics vary by year and student interest. Prerequisite: Linguistics 216. 6 credits, SS; FSR, Not offered in 2013-2014
123. 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 2013-2014
124. Topics in Phonology More on phonology. This course examines a small number of topics in depth. Particular topics vary from year to year. Prerequisite: Linguistics 217. 6 credits, SS; FSR, Not offered in 20132014
125. 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, LS, Offered in alternate years, Fall-C. Fortin
126. 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, Not offered in 2013-2014
127. Comparative Polynesian Syntax The languages of Polynesia represent a rich, and understudied, source of data for the study of syntactic micro-variation, i.e. how closely related languages differ syntactically despite sharing many superficial features. Working in a seminar format, we compare Polynesian languages with respect to some of the central topics in syntactic theory. We also consider if and how case-marking pattern interacts with syntax, given that Polynesian has languages with both accusative and ergative case systems. Additional morphological and phonological properties will be considered given time and student interest. Prerequisite: Linguistics 216. 6 credits, FSR, Spring-D. Medeiros
128. Senior Thesis 3 credits, S/CR/NC, ND; FSR, Fall—Staff
129. Integrative Exercise 6 credits, S/NC, ND; NE, Winter—Staff

# Other Courses Pertinent to Linguistics: <br> ASLN 111 Writing Systems <br> ASLN 260 Historical Linguistics (Not offered in 2013-2014) <br> ASST 284 Linguistics Seminar: History and Culture of Japan <br> CHIN 248 The Structure of Chinese (Not offered in 2013-2014) <br> CS 202 Mathematics of Computer Science <br> CS 254 Computability and Complexity <br> CS 322 Natural Language Processing <br> PHIL 210 Logic <br> PHIL 223 Philosophy of Language <br> PSYC 234 Psychology of Language (Not offered in 2013-2014) <br> PSYC 362 Psychology of Spoken Words (Not offered in 2013-2014) <br> SOAN 274 Language, Culture and Society (Not offered in 2013-2014) <br> <br> LITERARY AND CULTURAL STUDIES (LCST) 

 <br> <br> LITERARY AND CULTURAL STUDIES (LCST)}
101. Cross-Cultural Psychology Seminar in Prague: Communicating in the Czech Republic This highly recommended 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/CR/NC, Not offered in 2013-2014
245. 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, AL, WR; LA, WR2, IS, Winter-S. Carpenter

## MATHEMATICS (MATH)

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 encouraged to take Computer Science 111.

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
Of the six advanced courses, at most two may be from outside the Carleton Department of Mathematics.

In addition, each senior major must complete an integrative exercise which consists of a group or original 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. Each version of Matematics 315 may be taken once. In addition, each senior major must complete an integrative exercise which consists of a group or original research project. Majors are required to participate in the mathematical life of the department by attending colloquia, comps presentations, and other activities. 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

100. The Mathematics of Democracy We aspire to live in a democratic society, but what exactly does this mean? How can we decide, for example, which candidate in an election has the support of the people? How can Congressional seats be apportioned to the States "according to their respective numbers?" Are these things even possible? Recently, mathematical analysis has brought new insight to these old questions, often with surprising results. We will study some of this work and its implications for our democratic aspirations, and perhaps gain some appreciation for the power and elegance of mathematics along the way. 6 credits, AI, WR1, Fall-A. Gainer-Dewar
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-H. Wong
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—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 Mathematics 211, Mathematics 215 or Psychology 200/201. 6 credits, MS; FSR, QRE, Fall, Spring-K. St. Clair, M. Ott
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, $S / C R / N C, M S$; 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 265-275 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. Prerequisite: Mathematics 211.6 credits, 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-E. Egge, D. Haunsperger, R. Jones
111. Ordinary Differential Equations An introduction to ordinary differential equations, including techniques for finding solutions, conditions under which solutions exist, and some qualitative analysis. Prerequisite: Mathematics 232 or permission of the instructor. 6 credits, MS; FSR, Winter, Spring-M. Krusemeyer
112. 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, Winter-S. Kennedy
113. 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, MS; FSR, QRE, Winter, Spring—L. Chihara, K. St. Clair
114. Chaotic Dynamics An exploration of the behavior of non-linear dynamical systems. Topics include one and two-dimensional dynamics, Sarkovskii's Theorem, chaos, symbolic dynamics,and the Hénon Map. Prerequisite: Mathematics 236 or consent of the instructor. 6 credits, MS; FSR, Offered in alternate years, Not offered in 2013-2014
115. 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-R. Dobrow, M. Ott
116. Introduction to Statistical Inference Introduction to modern mathematical statistics. The mathematics underlying fundamental statistical concepts will be covered as well as applications of these ideas to real-life data. Topics include: resampling methods (permutation tests, bootstrap intervals), classical methods (parametric hypothesis tests and confidence intervals), parameter estimation, goodness-of-fit tests, regression, and Bayesian methods. The statistical package R will be used to analyze data sets. Prerequisite: Mathematics 265. 6 credits, MS; FSR, QRE, Winter-L. Chihara
117. Statistical Consulting Students will apply their statistical knowledge by analyzing data problems solicited from the Northfield community. Students will also learn basic consulting skills, including communication and ethics. Prerequisite: Mathematics 245 and permission of instructor. 2 credits, $S / C R / N C, N D ; F S R, Q R E$, Fall, Winter, Spring-K. St. Clair
118. Seminar in Set Theory Introduction to set-theoretic foundations of mathematics. The axiom system of Zermelo-Fraenkel, cardinal and ordinal numbers, and the Axiom of Choice. As time permits, additional topics may include construction of the real number, transfinite induction, or consistency/independence proofs. Prerequisite: Mathematics 236 or consent of the instructor. 6 credits, MS; FSR, Spring-G. Nelson
119. Assessment and Communication of External Mathematical Activity An independent study course intended for students who have completed an external activity related to the mathematics major (for example, an internship or an externship) to communicate (both in written and oral forms) and assess their mathematical learning from that activity. Prerequisite: Permission of Department Chair and homework in advance of the external mathematical activity. 1 credits, S/CR/NC, ND; NE, Fall, Winter, Spring—Staff
120. 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, Not offered in 2013-2014
121. Topics in Probability and Statistics: Statistical Computing Topics include generating random variables, monte carlo integration, markov chains monte carlo. We will use R extensively. Prerequisite: Prerequisite: Mathematics 275. 6 credits, MS; FSR, QRE, Spring-L. Chihara
122. Topics in Probability and Statistics: Introduction to Sampling Techniques Covers sampling design issues beyond the basic simple random sample: stratification, clustering, domains, and complex designs like two-phase and multistage designs. Inference and estimation techniques for most of these designs will be covered and the idea of sampling weights for a survey will be introduced. This course will also teach methods for graphing complex survey data and exploring relationships in complex survey data using regression and chisquare tests. Prerequisite: Mathematics 215 (or equivalent) or 275. 6 credits, MS; FSR, QRE, Offered in alternate years, Fall-K. St. Clair
123. 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-G. Nelson
124. 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-G. Nelson
125. 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, Fall-M. Krusemeyer
126. 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, Not offered in 2013-2014
127. 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, Sturm-Liouville theory, and Fourier transforms. Prerequisite: Mathematics 241.6 credits, FSR, Spring-S. Patterson
128. 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, Winter-J. Goldfeather
129. Differential Geometry Local and global theory of curves, Frenet formulas. Local theory of surfaces, normal curvature, geodesics, Gaussian and mean curvatures, Theorema Egregium. Prerequisite: Mathematics 236 or consent of the instructor. 6 credits, MS; FSR, Offered in alternate years, Not offered in 2013-2014
130. 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, Not offered in 2013-2014
131. 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, Spring-S.

## Patterson

352. Topics in Abstract Algebra An intensive study of one or more of the types of algebraic systems studied in Mathematics 342. Prerequisite: Mathematics 342 . 6 credits, MS; FSR, Spring-M. Krusemeyer
353. Topology An introduction to the study of topological spaces. We develop concepts from point-set and algebraic topology in order to distinguish between different topological spaces up to homeomorphism. Topics include methods of construction of topological spaces; continuity, connectedness, compactness, Hausdorff condition; fundamental group, homotopy of maps. Prerequisite: Mathematics 321 or permission of the instructor. 6 credits, FSR, Offered in alternate years, Spring-H. Wong
354. Topics in Algebraic Number Theory Study of integers in algebraic extensions of the rationals. Motivated by a failed attempt to prove Fermat's last theorem, we define the ring of integers, examine the failure of unique factorization, and rehabilitate it somewhat by showing that ideals have unique factorization into prime ideals. Further topics may include the finiteness of the class number, units in rings of integers, relations to Galois theory, cyclotomic fields, class number formulas, and the Chebotarev density theorem. Where appropriate for comps projects, links to arithmetic dynamics will be given. Prerequisite: Mathematics 342 and consent of the instructor. 6 credits, FSR, Winter-R. Jones
355. Combinatorics of Symmetric Functions Study of symmetric functions with an emphasis on the underlying combinatorics. Course opens with several bases for the space of symmetric functions, including elementary symmetric functions, complete homogeneous symmetric functions, power sum symmetric functions, and Schur functions. The rest of the course is devoted to combinatorial answers to algebraic questions; topics may include standard and semistandard tableaux, Kostka numbers, the hook length formula, the Robinson-Schensted-Knuth correspondence, Cauchy's identity, the Pieri rules, lattice paths and the Jacobi-Trudi identities, the Murnaghan-Nakayama rule, the Littlewood-Richardson rule, Knuth equivalence on words, jeu de taquin, and compositions and quasisymmetric functions. Prerequisite: Mathematics 333, an equivalent Budapest Semester in Mathematics course, or consent of the instructor. 6 credits, FSR, Fall-E. Egge
356. 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, Fall, Winter, Spring-Staff

## MEDIEVAL AND RENAISSANCE STUDIES CONCENTRATION

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 coordinators--other advanced seminars in which the concentratorâ??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):
ARBC 185 The Creation of Classical Arabic Literature
ARCN 246 Archaeological Methodology (Not offered in 2013-2014)
ARCN 395 Archaeology: Science, Ethics, Nationalism and Cultural Property
ARTH 101 Introduction to Art History I
ARTH 102 Introduction to Art History II
ARTH 180 Medieval Art
ARTH 226 The Gothic Cathedral (Not offered in 2013-2014)
ARTH 234 Italian Renaissance Art (Not offered in 2013-2014)
ARTH 285 The Art of Death in the Middle Ages (Not offered in 2013-2014)
ENGL 114 Introduction to Medieval Narrative (Not offered in 2013-2014)
ENGL 201 Chaucer I: The Canterbury Tales (Not offered in 2013-2014)
ENGL 209 Twelfth Night: A Project Course
ENGL 210 From Chaucer to Milton: Early English Literature
ENGL 216 Milton
ENGL 244 Shakespeare I
ENGL 309 Renaissance Selves (Not offered in 2013-2014)
ENGL 310 Shakespeare II
FREN 351 Love, War and Monsters in Early Modern France
GERM 230 From Gutenberg to Gates: The History and Practice of Printing
GERM 231 Damsels, Dwarfs, and Dragons: Medieval German Literature (Not offered in

HIST 131 Saints, Sinners, and Philosophers in Late Antiquity (Not offered in 2013-2014)
HIST 137 Early Medieval Worlds (Not offered in 2013-2014)
HIST 138 Crusades, Mission, and the Expansion of Europe
HIST 139 Foundations of Modern Europe (Not offered in 2013-2014)
HIST 201 Rome Program: Power and Piety in Medieval Rome, 300-1150 (Not offered in 2013-2014)
HIST 204 Crusade, Contact and Exchange in the Medieval Mediterranean (Not offered in 2013-2014)
HIST 206 Rome Program: Eternal City in Time: Urban Structure and Change (Not offered in 2013-2014)
HIST 207 Rome Program: A Roman Journal: Travelers' Accounts as Source and Experience (Not offered in 2013-2014)
HIST 230 Institutional Structure and Culture in the Middle Ages (Not offered in 20132014)

HIST 231 Mapping the World Before Mercator
HIST 232 Renaissance Worlds in France and Italy
HIST 233 Cultures of Empire: Byzantium, 710-1453 (Not offered in 2013-2014)
HIST 236 Women's Lives in Pre-Modern Europe (Not offered in 2013-2014)
HIST 243 The Peasants are Revolting! Society and Politics in the Making of Modern
France (Not offered in 2013-2014)
HIST 273 Go-Betweens and Rebels in the Andean World
HIST 278 The Spanish Inquisition (Not offered in 2013-2014)
LATN 243 Medieval Latin (Not offered in 2013-2014)
MUSC 210 Medieval and Renaissance Music (Not offered in 2013-2014)
RELG 122 Introduction to Islam
RELG 123 The Qur'an (Not offered in 2013-2014)
RELG 162 Jesus, Paul, and Christian Origins (New Testament)
RELG 163 Qur'an
RELG 231 From Luther to Kierkegaard (Not offered in 2013-2014)
SPAN 330 The Invention of the Modern Novel: Cervantes' Don Quijote (Not offered in 2013-2014)
SPAN 331 Baroque Desires
Supporting Courses ( 18 credits required):
Note: all courses listed as "core courses" also qualify as "supporting courses."
ARBC 185 The Creation of Classical Arabic Literature
ARBC 215 Readings in Medieval Arabic Anthologies (Not offered in 2013-2014)
ARCN 246 Archaeological Methodology (Not offered in 2013-2014)
ARCN 395 Archaeology: Science, Ethics, Nationalism and Cultural Property
ARTH 101 Introduction to Art History I
ARTH 102 Introduction to Art History II
ARTH 170 History of Printmaking
ARTH 180 Medieval Art
ARTH 226 The Gothic Cathedral (Not offered in 2013-2014)
ARTH 233 Van Eyck, Bosch, Bruegel: Their Visual Culture (Not offered in 2013-2014)
ARTH 234 Italian Renaissance Art (Not offered in 2013-2014)
ARTH 238 Rembrandt, Vermeer and Netherlandish Art
ARTH 251 Ruins and Romantics: English Gothic and Gothic-Revival Art and Architecture
(Not offered in 2013-2014)
ARTH 285 The Art of Death in the Middle Ages (Not offered in 2013-2014)
ARTH 307 Rome: The Art of Michelangelo and Caravaggio (Not offered in 2013-2014)
ARTH 351 English Art and Architecture on Site (Not offered in 2013-2014)
ENGL 114 Introduction to Medieval Narrative (Not offered in 2013-2014)
ENGL 201 Chaucer I: The Canterbury Tales (Not offered in 2013-2014)
ENGL 210 From Chaucer to Milton: Early English Literature
ENGL 213 Christopher Marlowe (Not offered in 2013-2014)
ENGL 214 Revenge Tragedy (Not offered in 2013-2014)
ENGL 244 Shakespeare I
ENGL 309 Renaissance Selves (Not offered in 2013-2014)
ENGL 310 Shakespeare II
FREN 351 Love, War and Monsters in Early Modern France
GERM 230 From Gutenberg to Gates: The History and Practice of Printing
GERM 231 Damsels, Dwarfs, and Dragons: Medieval German Literature (Not offered in 2013-2014)
HIST 131 Saints, Sinners, and Philosophers in Late Antiquity (Not offered in 2013-2014)
HIST 137 Early Medieval Worlds (Not offered in 2013-2014)
HIST 138 Crusades, Mission, and the Expansion of Europe
HIST 139 Foundations of Modern Europe (Not offered in 2013-2014)
HIST 201 Rome Program: Power and Piety in Medieval Rome, 300-1150 (Not offered in 2013-2014)
HIST 202 Iconoclasm in the Early Middle Ages (Not offered in 2013-2014)
HIST 203 Papacy, Church and Empire in the Age of Reform (Not offered in 2013-2014)
HIST 204 Crusade, Contact and Exchange in the Medieval Mediterranean (Not offered in 2013-2014)
HIST 206 Rome Program: Eternal City in Time: Urban Structure and Change (Not offered in 2013-2014)
HIST 207 Rome Program: A Roman Journal: Travelers' Accounts as Source and Experience (Not offered in 2013-2014)
HIST 230 Institutional Structure and Culture in the Middle Ages (Not offered in 20132014)

HIST 231 Mapping the World Before Mercator
HIST 232 Renaissance Worlds in France and Italy
HIST 236 Women's Lives in Pre-Modern Europe (Not offered in 2013-2014)
HIST 239 Britain, c. 1485-1834: From Sceptred Isle to Satanic Mills (Not offered in 20132014)

HIST 243 The Peasants are Revolting! Society and Politics in the Making of Modern France (Not offered in 2013-2014)
HIST 245 Ireland: Land, Conflict and Memory
HIST 268 The Indian Ocean World in the Age of European Expansion (Not offered in 2013-2014)
HIST 273 Go-Betweens and Rebels in the Andean World
HIST 278 The Spanish Inquisition (Not offered in 2013-2014)
LATN 233 Catiline
LATN 242 Apuleius, (Not offered in 2013-2014)
LATN 243 Medieval Latin (Not offered in 2013-2014)
LATN 253 Seneca the Younger (Not offered in 2013-2014)

LATN 257 Caesar, Lucan, and Civil War (Not offered in 2013-2014)
LATN 258 Seminar: Horace
MUSC 210 Medieval and Renaissance Music (Not offered in 2013-2014)
PHIL 270 Ancient Greek Philosophy: Virtue, Reality and Explanations
POSC 250 Ancient Political Philosophy (Not offered in 2013-2014)
POSC 254 Freedom, Excellence, Happiness: Aristotle's Ethics
POSC 350 Ancient Political Philosophy (Not offered in 2013-2014)
RELG 122 Introduction to Islam
RELG 123 The Qur'an (Not offered in 2013-2014)
RELG 163 Qur'an
RELG 231 From Luther to Kierkegaard (Not offered in 2013-2014)
RELG 287 Many Marys
SPAN 330 The Invention of the Modern Novel: Cervantes' Don Quijote (Not offered in 2013-2014)
SPAN 331 Baroque Desires
Capstone Seminars (one course required):
ARCN 395 Archaeology: Science, Ethics, Nationalism and Cultural Property
ARTH 307 Rome: The Art of Michelangelo and Caravaggio (Not offered in 2013-2014)
ENGL 309 Renaissance Selves (Not offered in 2013-2014)
FREN 351 Love, War and Monsters in Early Modern France
HIST 395 Controversial Histories: Conflict, Polemic, and Persuasion in Historical Perspective

## MIDDLE EASTERN LANGUAGES (MELA)

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, Z. Haidar
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-Z. Haidar
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-Z. Haidar
104. The Creation of Classical Arabic Literature In this course we will explore the emergence of Arabic
literature in one of the most exciting and important periods in the history of the Islamic and Arab world; a time in which pre-Islamic Arabian lore was combined with translated Persian wisdom literature and Greek scientific and philosophical writings. We will explore some of the different literary genres that emerged in the New Arab courts and urban centers: from wine and love poetry, historical and humorous anecdotes, to the Thousand and One Nights, and discuss the socio-historical forces and institutions that shaped them. All readings are in English. No Arabic knowledge required. 6 credits, $A L$, RAD; LA, IS, Winter-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 103 or placement test indication. 6 credits, ND; NE, Fall-Y.
Klein, Z. Haidar
106. 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 placement test indication. 6 credits, ND; NE, Winter-Y. Klein
107. Colloquial Arabic Colloquial Arabic is a spoken variety of Arabic, used by native speakers of Arabic in various informal everyday situations. In this course we will focus on acquiring conversational and listening comprehension skills and building vocabulary. We will develop communicative skills in colloquial Arabic through active use of the dialect in the class. We will build cultural competence in two Levantine dialects of Arabic, Jordanian and Palestinian, by studying colloquial proverbs, folktales, riddles, and metalinguistic jokes. Throughout our classes we will incorporate a range of audiovisual materials, as well as popular Jordanian and Palestinian songs. Prerequisite: Arabic 103 or equivalent. 6 credits, NE, Winter-Z. Haidar
108. Readings in Medieval Arabic Anthologies The concept of adab 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, al-Nuwayri and al-Ibshihi. All readings are in Arabic. Prerequisite: Arabic 205 or equivalent. 6 credits, $A L, R A D ; L A$, IS, Offered in alternate years, Not offered in 2013-2014
109. Contemporary Music in the Middle East: From Umm Kulthum to Nancy Ajeam 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, $A L, R A D ; L A, I S$, Spring-Y. Klein
110. 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, $A L, R A D ;$ LA, IS, Spring-Z. Haidar

## Hebrew Courses (HEBR)

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-M.

## Reinberg

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-M. Reinberg
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—M. Reinberg
104. Intermediate Modern Hebrew In this course students will strengthen their 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, socio-cultural 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, AL, WR, RAD; LA, WR2, IS, 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 2013-2014
107. Faith and Fiction: Exploring Israeli National Identity This course is the second part of a two-term 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 2013-2014
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, AL, WR, RAD; LA, WR2, IS, Not offered in 2013-2014

## 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

## MUSIC (MUSC)

## 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

There are two registration options for nine half-hour 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 S/CR/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 S/CR/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 and 285 are for one credit, Music 250-284, 286, and 299 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, 247 or 248, AMST 214)
6 credits: Composition (Music 220; 285/286 cannot substitute for 220)
6 credits: Music Since 1900 (Music 303)
2 credits: Music Major Colloquium (Music 398)
4 credits: Integrative Exercise (Music 400)
8 credits: Juried Lessons, no more than 4 credits of 299 may count toward this requirement.

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. Degenerate Music This course examines the causes, methods and logic behind attempts to censor music by governments, commercial corporations and religious authorities through guided listening, reading, and writing assignments. Lectures focus on the "entartete musik" of Nazi Germany and the social realism of Stalinist Russia. A comparative examination of these two instances of systematic culture control leads to the formation of a definition for music censorship and suggests a methodology for the study of other examples. Contemporary cases of music censorship are then selected from a wide range of countries, including North Korea, Iran, South Africa, Afghanistan, and the United States. 6 credits, AI, WR1, IS, Fall-H. Valdivia
101. Music Fundamentals A course designed for students with little or no music background as preparation and support for other music courses, ensemble participation and applied music study. The course covers the fundamentals of note and rhythmic reading, basic harmony, and develops proficiency in aural skills and elementary keyboard skills. This class will make regular use of the music computer lab for assignments. 3 credits, AL; ARP, Spring-N. Melville
102. 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, Winter-J. Ellinger
103. Classical Music: An Introduction 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. Prerequisite: No prerequisite: the ability to read music is not necessary. 6 credits, $A L, W R ; L A$, WR2, Winter-L. Archbold
104. 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 U.S., 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, AL, WR; LA, WR2, Not offered in 2013-2014
105. 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/CR/NC, AL; ARP, Fall-A. Freeman
106. 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, $A L, W R ; L A, W R 2$, Not offered in 2013-2014
107. 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, AL, WR; LA, WR2, Spring-A. Freeman
108. 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, AL, WR; LA, WR2, Not offered in 2013-2014
109. Introduction to 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, with each student conducting short assignments as frequently as possible. Prerequisite: Ability to read music and active participation in a faculty conducted ensemble, or permission of instructor. 3 credits, ARP, Offered in alternate years, Not offered in 2013-2014
110. 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, Winter-A. Flory
111. 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, $A L ; L A, I D S$, Not offered in 2013-2014
112. Golden Age of R and B A survey of rhythm and blues from 1945 to 1975, focusing on performers, composers, and the music industry. 6 credits, AL, WR; LA, WR2, IDS, Winter-A. FIory
113. History of Rock A survey of rock and roll from its beginnings to the present day, focusing on the performers, composers and the music industry. 6 credits, AL, WR; LA, WR2, IDS, Fall-A. Flory
114. Global Music Traditions We will study musical traditions of a variety of places, usually including India, South Africa, Indonesia, Iran, Peru, China, and Ireland. With the goal of understanding both the sound and the meaning of these musics, we will consider traditional and popular music and musical life in relation to identity, politics, religion, gender, and modernity. Students will engage multiple forms of ethnomusicological scholarship, develop critical listening skills, and learn to convey their growing understanding of musical elements in writing and oral presentation. No musical experience necessary. 6 credits, AL, WR, RAD; LA, WR2, IS, Not offered in 2013-2014
115. Global Popular Music We will study the profusion of popular musics around the globe, and also music which has become global in its reach. Genres include reggae, bhangra, tango, salsa, huayno, highlife, filmi, Afrobeat, rai, soca, merengue, and soukous. Musics will be explored in their historical, political, and social contexts, with the goal of understanding both their sounds and their meanings. Students will engage multiple forms of ethnomusicological scholarship, develop critical listening skills, and learn to convey their growing
understanding of musical elements in writing and oral presentation. No musical experience necessary. 6 credits, AL, WR, RAD; LA, WR2, IS, Fall-M. Russell
116. Music and Social Movements We'll consider the central role of music in a variety of social movements, including the labor, civil rights, gay rights, and anti-war movements, the anti-nuclear and environmental movements, the American Indian Movement, the Black Arts movement, the Jesus Movement, the Arab Spring, and Occupy Wall Street. How, specifically, is music instrumental in social change? What musical choices are made, and by whom? How are new musics made, and old musics repackaged, to help mobilize social movements and create collective identity? We'll approach these questions through focused listening and through the work of diverse scholars and participants. No musical experience required. 6 credits, $A L, W R ; S I$, WR2, IDS, Not offered in 2013-2014
117. Music of Africa with Beginning Karimba Instruction Students will study a variety of African musical traditions through listening, reading, and analysis, and through beginning instruction on the karimba, a 15-key lamellophone from Zimbabwe (instruments provided). By the end of the course, students will be able to recognize distinct characteristics of several African musical genres, distinguish between scholarly approaches to the study of African music, and be ale to play a few tunes on the instrument. No musical experience required. 3 credits, AL; ARP, IS, Not offered in 2013-2014
118. 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, $S / C R / N C, A L ; N E$, Fall, Winter, Spring-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, $A L$; ARP, Fall, Winter, Spring-M. McCright, N. Melville, M. Widman
151. 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. 1 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, $S / C R / N C, A L ; N E, F a l l$, 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, Fall, Winter, Spring-E. Ericksen, M. Horozaniecki, H. Valdivia
156. Viola 1 credits, S/CR/NC, AL; NE, 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. Classical String Bass The study of the acoustic string bass in the Classical style. 1 credits, $S / C R / N C, A L$; ARP, Fall, Winter, Spring-C. Martin

158J. Classical String Bass (Juried) The study of the acoustic string bass in the Classical style. 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/CR/NC, AL; NE, Fall, Winter, Spring-M. Klemp
160-02. English Horn 1 credits, S/CR/NC, AL; 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/CR/NC, AL; NE, Fall, Winter, Spring-N. Olsen

161J. Clarinet (Juried) 1 credits, AL; ARP, Fall, Winter, Spring-N. Olsen
162. Saxophone 1 credits, S/CR/NC, AL; NE, Fall, Winter, Spring-G. Keel

162J. Saxophone (Juried) 1 credits, AL; ARP, Fall, Winter, Spring-G. Keel
163. Bassoon 1 credits, S/CR/NC, AL; NE, Fall, Winter, Spring-J. Bryce, A. Pesavento

163J. Bassoon (Juried) 1 credits, AL; ARP, Fall, Winter, Spring-J. Bryce, A. Pesavento
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/CR/NC, AL; NE, Fall, Winter, Spring-R. Rodman
166-02. Euphonium 1 credits, S/CR/NC, AL; NE, 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/CR/NC, AL; NE, Fall, Winter, Spring-R. Rodman

167J. Tuba (Juried) 1 credits, AL; ARP, 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, $S / C R / N C, A L ; N E$, 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, $S / C R / N C, A L ; N E, F a l l$, 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, AL; ARP, Fall, Winter, Spring-E. Niemisto
170. Harpsichord 1 credits, S/CR/NC, AL; 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/CR/NC, AL; NE, Fall, Winter, Spring-J. Hall 171J. Organ (Juried) Basic piano skills required. 1 credits, AL; ARP, Fall, Winter, Spring-J. Hall 174. Recorder 1 credits, S/CR/NC, AL; 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/CR/NC, AL; 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. Electric \& Acoustic Bass The study of either electric bass guitar or acoustic string bass in all contemporary styles including rock, jazz, pop, rap, and reggae. 1 credits, S/CR/NC, AL; ARP, Fall, Winter, Spring-T. Schilling

176J. Electric \& Acoustic Bass (Juried) The study of either electric bass guitar or acoustic string bass in all contemporary styles including rock, jazz, pop, rap, and reggae. 1 credits, AL; ARP, Fall, Winter, Spring-T. Schilling
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, $S / C R / N C, A L ; N E$, 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, AL; 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/CR/NC, AL; NE, 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-L. Archbold, 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-L. Archbold, 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/CR/NC, AL; 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, Spring-D. 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/CR/NC, AL; 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, $A L$; 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/CR/NC, AL; 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/CR/NC, AL; 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/CR/NC, AL; NE, 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 men's 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/CR/NC, AL; 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 comprise the core of 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 and concurrent registration in Music 185 are required. 1 credits, S/CR/NC, AL; 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/CR/NC, 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 experience in a music ensemble, Chinese Musical Instruments, or permission of the instructor. 1 credits, $S / C R / N C, A L$; ARP, IS, Fall-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 sight-reading 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/CR/NC, AL; ARP, 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/CR/NC, AL; ARP, IS, Not offered in 2013-2014
192. West 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 instructor. 1 credits, S/CR/NC, ARP, IS, Fall, Winter, Spring-J. 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, 245, or permission of the instructor. 1 credits, S/CR/NC, AL; ARP, IS, Not offered in 2013-2014
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/CR/NC, AL; ARP, Fall, Winter, Spring-N. Melville
195. Jubilee Singers The Carleton Jubilee Singers perform sacred music in the oral traditions of Africans and Black Americans. The ensemble performs each year in the MLK, Jr. commemorative worship service, the Black Student Alliance variety show, and the Black History Month worship service. All students are welcome without audition. 1 credits, $S / C R / N C, A L ; A R P$, Winter-L. Burnett
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: $\$ 78$. Not to be taken concurrently with Music 152 or 252 (Guitar). \$78 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: \$78. 1 credits, S/CR/NC, ND; ARP, 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-A. Flory
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, $A L ; L A$, Winter-R. Rodman
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, $A L, W R$; LA, WR2, Not offered in 2013-2014
208. Computer Music and Sound This course will survey computer techniques for analyzing, synthesizing, manipulating and creating musical sounds. We'll study the basic components of digital sound: waveforms, oscillators, envelopes, delay lines, and filters. We'll analyze and modify sounds using the Fast Fourier Transform (FFT). We'll study several methods of sound synthesis and create and play original music using open source computer music languages. Course projects will include real-time performances on multiple computers using video game controllers. 6 credits, AL; ARP, Winter-J. Ellinger
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, AL; LA, Not offered in 2013-2014
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, Not offered in 2013-2014
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-A. Freeman
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 in-class 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 2013-2014
239. The Philosophy of Music What Is Music? What exactly is a "musical composition," especially in the age of recorded music and sampling? How is music meaningful? Can music tell a story? Express an emotion? Induce an emotion (and if so, what kind)? Convey a proposition? And if music can do any of these things, how does it do it? To explore these questions, we will discuss readings by contemporary musicians and philosophers, and musical examples ranging from Mozart to Muddy Waters and from Beethoven to the Beatles. Prerequisite: A previous course in music or philosophy, or permission of the instructor. 6 credits, AL, WR; HI, WR2, Not offered in 2013-2014
243. Musical Cultures of the Caribbean This course explores the sounds an sociocultural contexts of a number of Caribbean musics, usually including ska, reggae, salsa, calypso, soca, merengue, bachata, zouk and reggaeton. Popular, trational, and sacred musics are included. While each island has unique and varied traditions, a number of themes relevant to Caribbean ethnomusicology connect them. In addition to our focused listening, we will read works by scholars, musicians, and critics addressing such themes as acculturation, race, class, ethnicity, politics, nationalism, and globalization, with the goal of understanding how these shape and are shaped by musical practice. No musical experience needed. 6 credits, WR; LA, WR2, IS, Not offered in 20132014
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. 6 credits, $A L, W R ; L A$, WR2, IS, Not offered in 2013-2014
247. The 1960s Folk Music Revival We'll consider the historical basis of musical style, the role of recorded music, the social construction of a "folk music" milieu, and explore the music of Pete Seeger, Woody Guthrie, Phil Ochs, Bob Dylan, Joan Baez, among others. No musical experience necessary; you need not read musical notation. Includes one day per week of applied instruction: Section 1 (beginning folk guitar--instruments provided) if you have no guitar experience; Section 2 (folk workshop --provide your own instruments) if you have one year or more experience on guitar, banjo, fiddle, mandolin, ukelele, dobro, viola, cello, or bass. 6 credits, AL, WR; ARP, WR2, IDS, Fall-M. Russell
248. Music of India This course focuses on the classical Hindustani and Carnatic music traditions of North and South India, with briefer coverage of folk and popular traditions, including Bollywood/film music. We will consider the historical and cultural contexts of several genres, reading the work of scholars from various disciplines, and studying relevant audio and video. Students will learn rudimentary theory of Indian classical music, understand its twentieth and twenty-first century developments, and develop listening skills to enable recognition of major genres, styles, and artists.One day a week will be devoted to applied study of Indian vocal raga. No musical background required. 6 credits, ARP, IS, Offered in alternate years, Spring-M. Russell
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: permission of instructor is required. 2 credits, $S / C R / N C, A L$; NE, Fall, Winter, Spring-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: permission of instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-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: Music 151 or permission of the instructor. 2 credits, S/CR/NC, AL; 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: Music 151 or 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/CR/NC, AL; NE, 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, $S / C R / N C, A L ; N E$, 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, $S / C R / N C, A L ; N E$, Fall, 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, $S / C R / N C, A L ; N E$, Fall, Winter, Spring-Staff
257J. Cello (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-Staff
258. Classical String Bass The study of the acoustic string bass in the Classical style. Prerequisite: Permission of instructor. 2 credits, S/CR/NC, AL; NE, Fall-C. Martin

258J. Classical String Bass (Juried) The study of the acoustic string bass in the Classical style. Prerequisite: Permission of instructor. 2 credits, AL; ARP, Fall-C. Martin
259. Flute Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E$, Fall, 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, $S / C R / N C, A L ; N E, F a l l$, 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, AL; 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, $S / C R / N C, A L$; NE, Fall, Winter, Spring-G. Keel
262J. Saxophone (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-G. Keel
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, A. Pesavento

263J. Bassoon (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-J. Bryce, A. Pesavento
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, AL; 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, AL; ARP, Fall, 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, AL; ARP, Fall, Winter, Spring-R. Rodman

266J-02. Euphonium (Juried) Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-R. Rodman
267. Tuba Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E$, Fall, 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, $S / C R / N C, A L ; N E$, 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, $S / C R / N C, A L ; N E$, Fall, 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, AL; ARP, 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-J. Hall
271J. Organ (Juried) Basic piano skills required. Prerequisite: Permission of the instructor is required. 2 credits, AL; ARP, Fall, Winter, Spring-J. Hall
274. Recorder Prerequisite: Permission of the instructor is required. 2 credits, $S / C R / N C, A L ; N E$, Fall, 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, SpringL. 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. Electric \& Acoustic Bass The study of either electric bass guitar or acoustic string bass in all contemporary styles including rock, jazz, pop, rap, and reggae. Prerequisite: Permission of instructor. 2 credits, S/CR/NC, AL; NE, Fall, Winter, Spring-T. Schilling
276J. Electric \& Acoustic Bass (Juried) The study of either electric bass guitar or acoustic string bass in all contemporary styles including rock, jazz, pop, rap, and reggae. Prerequisite: Permission of instructor. 2 credits, AL; ARP, Fall, Winter, Spring-T. Schilling
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/CR/NC, AL; 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/CR/NC, AL; NE, Fall, Winter, Spring-L. Archbold, 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, AL; ARP, Fall, Winter, Spring-L. Archbold
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, $S / C R / N C, A L ; N E$, 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/CR/NC, AL; NE, 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, $S / C R / N C, A L$; 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/CR/NC, AL; NE, 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, $S / C R / N C, A L ; N E$, 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 studentâ??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-A. Freeman
286J. Composition (Juried) Individual instruction focusing on the studentâ??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, $A L ; A R P$, Fall-A. Freeman
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, Fall, Winter, Spring-L. Archbold, Staff
303. Music Since 1900 This course, required for the music major, is both an overall survey of the Western art music of the twentieth century, and an analysis class designed to equip the major with analytical techniques in non-tonal music from Schoenberg to the avant-garde. Prerequisite: Music 202. 6 credits, AL, WR; LA, WR2, Not offered in 2013-2014
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,
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, $A L$, WR; LA, WR2, Not offered in 2013-2014
332. Motown A research-based course focused on the people, music, and cultural contributions of the Motown Record Company from its antecedents throught he mid-1980s. Prerequisite: The ability to read music and a previous music course, or permission of the instructor. 6 credits, AL, WR; LA, IDS, Spring-A. Flory
333. The Beatles A critical examination of the music and cultural impact of the Beatles. Students will engage with primary and secondary materials relating to the music of the Beatles, perform basic musical analyses, and participate in class presentations. The course will conclude with a research paper. Prerequisite: The ability to read music and a previous music course, or permission of instructor. 6 credits, $A L, W R ; L A, W R 2$, Offered in alternate years, Winter-A. Flory
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, $S / C R / N C, N D ; N E$, Spring-Staff
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, Fall, Winter, SpringL. Archbold

## NEUROSCIENCE CONCENTRATION (NEUR)

## Requirements for the Concentration Core Courses:

There are four courses that are required as part of the concentration, including the capstone seminar. Only one of Biology 125 or 126 can be applied. Psychology 216 also requires completion of Psychology 217. Applicable courses are listed below:
(AP Biology does not count)
BIOL 125 Genes, Evolution, and Development
BIOL 125 Genes, Evolution, and Development: A Problem Solving Approach
BIOL 126 Energy Flow in Biological Systems
BIOL 386 Neurobiology
PSYC 216 Behavioral Neuroscience
PSYC 217 Laboratory Research Methods in Behavioral Neuroscience Capstone:
NEUR 395 Neuroscience Capstone Seminar Electives:
Students must take three elective courses. Among these, students must choose at least one course directly related to neuroscience and at least one that is related and relevant to the field. It is important to note that the third elective must be outside the student's major. See Neuroscience webpage to see which courses will complete which requirement.

BIOL 232 Human Physiology
BIOL 240 Genetics
BIOL 342 Animal Developmental Biology
BIOL 343 Animal Developmental Biology Laboratory
BIOL 368 Developmental Neurobiology

BIOL 369 Developmental Neurobiology Laboratory (Not offered in 2013-2014)
BIOL 379 Seminar: Behavioral Genetics
CS 254 Computability and Complexity
CS 321 Artificial Intelligence
LING 265 Language and Brain (Not offered in 2013-2014)
MUSC 227 Introduction to the Perception and Cognition of Music (Not offered in 20132014)

PHYS 261 Medical Physics (Not offered in 2013-2014)
PSYC 218 Hormones and Behavior
PSYC 220 Sensation and Perception
PSYC 221 Laboratory Research Methods in Sensation and Perception
PSYC 260 Health Psychology
PSYC 263 Sleep and Dreaming (Not offered in 2013-2014)
PSYC 267 Clinical Neuroscience
PSYC 318 Psychopharmacology (Not offered in 2013-2014)
PSYC 366 Cognitive Neuroscience (Not offered in 2013-2014)
PSYC 370 Neurobiology of Motivated Behaviors (Not offered in 2013-2014)
PSYC 371 Evolutionary and Developmental Trends in Cognition (Not offered in 20132014)

PSYC 376 Neural Plasticity
PSYC 379 Child and Adolescent Psychiatry
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/CR/NC, ND; NE, Spring-Staff

## PHILOSOPHY (PHIL)

## 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:

1. Core Courses ( 24 credits)

PHIL 210 Logic
PHIL 213 Ethics
PHIL 270 Ancient Greek Philosophy: Virtue, Reality and Explanations
PHIL 272 Modern Philosophy: Knowledge, God and Free Will
2. Theoretical Philosophy Area Requirement ( 6 credits) Theoretical philosophy courses include, but are not limited to, courses that predominantly cover themes from metaphysics, epistemology, the philosophy of language, the philosophy of science, logic, or the philosophy of mind.

One course at or above 200-level in theoretical philosophy (6 credits)

PHIL 211 Being, Time and Identity
PHIL 212 Epistemology (Not offered in 2013-2014)
PHIL 223 Philosophy of Language
PHIL 225 Philosophy of Mind (Not offered in 2013-2014)
PHIL 226 Love and Friendship
PHIL 228 Heaps of Liars: Logic, Language, and Metaphysics
PHIL 243 Animal Ethics: The Moral Status of Animals
PHIL 245 Cosmology and Ethics: Philosophical Visions
PHIL 250 Philosophy of Physics (Not offered in 2013-2014)
PHIL 251 Philosophy of Science
PHIL 274 Existentialism (Not offered in 2013-2014)
PHIL 395 Ancient Greek Moral Psychology: Virtue, Character and Happiness
PHIL 395 The Demands of Morality
3. Practical Philosophy/Value Theory Area Requirement ( 6 credits). Practical

Philosophy/Value Theory courses include, but are not limited to, courses that predominantly cover themes from ethics, political philosophy, social philosophy, or aesthetics.

One course at or above 200-level in practical philosophy/value theory (6 credits)
PHIL 221 Philosophy of Law
PHIL 222 Topics in Medical Ethics
PHIL 224 Philosophy of Literature (Not offered in 2013-2014)
PHIL 226 Love and Friendship
PHIL 229 Philosophy of Film and Emotion (Not offered in 2013-2014)
PHIL 232 Social and Political Philosophy: Justice and Politics (Not offered in 2013-2014)
PHIL 234 Aesthetics (Not offered in 2013-2014)
PHIL 243 Animal Ethics: The Moral Status of Animals
PHIL 395 Ancient Greek Moral Psychology: Virtue, Character and Happiness
PHIL 395 The Demands of Morality
4. Advanced Courses and Integrative Exercise (21 credits)

PHIL 395 Advanced Seminar (two sections must be taken, 12 credits)
PHIL 395 Ancient Greek Moral Psychology: Virtue, Character and Happiness
PHIL 395 The Demands of Morality
PHIL 399 Senior Thesis (6 credits)
PHIL 400 Integrative Exercise (3 credits)
Courses cannot be double counted to meet more than one of the above requirements.
That is, if a student takes a 395 Advanced Seminar in the philosophy of mind, it cannot count as both a theoretical philosophy distribution requirement (\#2 above) and an advanced seminar.

No more than six credits at the 100-level counts toward the major.
Depending on each student's individual educational goals, up to one course from another department can count toward the major. This is done in consultation with the chair of Philosophy.

## Philosophy Courses

100. 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, AI, WR1, Fall-J. Decker
101. Utopias What would a perfect society look like? What ideals would it implement? What social evils would it eliminate? This course explores some famous philosophical and literary utopias, such as Plato's "Republic," Thomas More's "Utopia," Francis Bacon's "New Atlantis," Ursula Le Gui's "The Dispossessed," and others. We will also consider some nightmarish counterparts of utopias, dystopias. One of the projects in this course is a public performance, such as a speech or a short play. 6 credits, Al, WR1, Fall-A. Moltchanova
102. 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, $\mathrm{HU}, \mathrm{WR}$; HI , WR2, Not offered in 2013-2014
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, WR; HI, WR2, Not offered in 2013-2014
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, Not offered in 2013-2014
105. Philosophical Problems This is an introduction to perennial philosophical questions, as well as the goals and methods of philosophy. We will cover selections from both historical and contemporary philosophers on the following five topics: (i) the nature and possibility of knowledge, (ii) the relationship between the mental and the material, (iii) the nature of the self, (iv) the nature and possibility of free will, and (v) the nature of morality. 6 credits, HU, WR; HI, WR2, Winter-S. Jansen
106. Life and Death Considered in the context of the universe humankind seems vanishingly insignificant. The entire history of humankind is but a blip on the map of space and time. Moreover, each of our lives is a blip on that blip. So what is the point of it all? In this course, we will look at the notion of "meaning" as it relates to human life, the universe, and the existence of God; whether death is something we should be afraid of; and the connections, if any, between happiness, morality and meaning. 6 credits, HI, WR2, Winter, Spring-D. Groll
107. 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, ND; FSR, Spring-J. Decker
108. Being, Time and Identity 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: one 100 level course in Philosophy. 6 credits, HU, WR; HI, WR2, Spring-A.

## Moltchanova

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. Prerequisite: One 100 level course in philosophy or permission of the instructor. 6 credits, HU; HI, Not offered in 2013-2014
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: One 100 level course in philosophy. 6 credits, HU, WR; HI, WR2, IS, Fall-D. Groll
214. Philosophy of Law This course provides students with an opportunity to engage actively in a discussion of theoretical questions about law. We will consider the nature of law as it is presented by natural law theory, legal positivism and legal realism. Then we will deal with responsibility and punishment, and challenges to the idea of the primacy of individual rights from legal paternalism and moralism. We will next inquire into the explanations of why individuals should obey the law, and conditions under which civil disobedience is justified. Finally, we will discuss issues raised by feminist legal theory and some theories of minority rights. 6 credits, HU, WR; HI, WR2, IDS, Offered in alternate years, Fall-A. Moltchanova
215. Topics in Medical Ethics Over the past forty years, the idea that competent patients have the right to make decisions about their own care has become paramount in medical ethics and medical practice. But the primacy of patient autonomy as a value raises a host of interesting questions: What can (or should) clinicians do when patients make poor decisions? What does it mean for a patient to be competent? Who should make decisions in those cases where the patient is deemed incompetent? And when, if ever, can clinicians refuse to offer treatment on moral grounds? We will explore these issues through a combination of philosophical readings and case studies. Prerequisite: Any other course in philosophy or permission of instructor. 6 credits, $H U, W R$; HI, WR2, Winter-D. Groll
216. Philosophy of Language In this course we will look at how philosophers have tried to understand language and its connection with human thought and communication. The course will be split into two parts: Semantics and Pragmatics. In the first part, we'll look at general features of linguistic expressions like meaning and reference. In the second part, we'll look at the various ways in which speakers use language. Topics to be considered in the second part include speech acts, implicature, and presupposition. 6 credits, $\mathrm{HU}, \mathrm{WR} ; \mathrm{HI}$, WR2, Offered in alternate years, Winter-J. Decker
217. Philosophy of Literature This class investigates some intriguing questions that philosophers have considered about literature. Why should a writer who is interested in philosophical issues write a work of literature rather than a philosophical treatise? What is the function or point of literature: to convey the truth, engage in make believe, or present a model for ways to live one's life? In addition we investigate the difference between fiction and non-fiction, interpretation, metaphor, the imagination, and the definition and ontology of literature. Readings will be drawn from philosophy as well as some case materials, including a novel and several films. 6 credits, HU, WR; HI, WR2, Not offered in 2013-2014
218. 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, HU, WR; HI, WR2, Not offered in 2013-2014
219. Love and Friendship This course will consider various philosophical views on the nature of love and friendship. It will focus on both the history of philosophical thinking about these notions from Plato and Aristotle to the twentieth century and a variety of contemporary views on the meaning of love and friendship that derive their insight from the most recent studies of emotion, agency, action, rationality, moral value, and motivation. We will also look at the variations in the understanding of love and friendship among the members of the same culture and across cultures. 6 credits, WR; HI, WR2, QRE, Winter-A. Moltchanova
220. Heaps of Liars: Logic, Language, and Metaphysics The ancient paradox of the heap (the--sorites-paradox) starts with innocent-looking claims about heaps and grains of sand--claims most of us are eager to accept--and propels us headlong into a blatant and shocking contradiction. A second ancient paradox invites us to comment on--liar sentences--such as "this sentence is false." We quickly find that we have made liars out of--
ourselves. Philosophical attempts to solve these puzzles have generated a vast wealth of independently interesting views in the philosophy of language, logic, and metaphysics. In this course, we will look at some of these theories. 6 credits, WR; FSR, WR2, Fall-J. Decker
221. Philosophy of Film and Emotion As moviegoers we have all had that wondrous experience of gasping, laughing or sniffling in response to fictional scenarios. This phenomenon raises several philosophical questions, to be explored in this class: (1) How do fictional situations arouse our emotions, and why do we care about the lives of fictional film characters? (2) Why do we enjoy films which evoke unpleasant emotions, like fear or sadness? (3) Why do we feel suspense even when we know a film's ending? (4) What is the difference between the emotions we experience in real life and the emotions we experience in the movie theater? Prerequisite: One 100 level course in Philosophy or permission of the instructor. 6 credits, HU, WR; HI, WR2, Not offered in 20132014
222. 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, Not offered in 2013-2014
223. 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 2013-2014
224. Animal Ethics: The Moral Status of Animals Do non-human animals have moral status, or are our moral obligations confined to human animals? Is our past and present treatment of animals morally justified? What bearing does the nature of animal minds and social behavior have on these questions? And how should human beings, both individually and collectively, practically apply ethical principles regarding nonhuman animals? In this course we shall explore these and related questions in a hands-on and interdisciplinary way, incorporating insights from prominent ethical traditions (e.g., utilitarianism, deontology and virtue ethics), cognitive ethology, anthropology and political science. 6 credits, HU, WR; HI, WR2, Spring-S. Jansen
225. Cosmology and Ethics: Philosophical Visions An overview of several prominent Western views, from Plato to the late twentieth century, on the fabric of the universe and the place of human agents within it. We will start of Plato's views on the body and the soul reflecting the structure of the cosmos. We will then consider the ideas of causation and human freedom as well as the problem of evil. We will discuss the notion of perspective, broadly construed, as the foundation of one's relationship with the world. This course emphasizes visualization, and several assignments will require either producing images or thinking and writing about images. 6 credits, HU, WR; HI, WR2, Spring-A. Moltchanova
226. 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, Not offered in 2013-2014
227. Philosophy of Science This course is an introduction to the history and philosophy of science. We will consider enduring philosophical issues such as: What type(s) of knowledge does science produce? What methods does science use in producing these types of knowledge? How do new scientific ideas come about, take hold, and fall away? What is the difference between science and philosophy? We will approach these questions historically, by considering how figures such as Darwin and Newton saw their views and projects in relation to their history. Our goal is to see current philosophical ideas about science in relation to our history. 6 credits, HI, WR2, Spring-W. Bausman
228. Ancient Greek Philosophy: Virtue, Reality and Explanations This limited survey of ancient Greek philosophy will center around its three most prominent figures (i.e. - Socrates, Plato and Aristotle) and their positions on the following topics: (1) virtue: What is virtue? Why be virtuous? Is/How is virtue taught? (Ethics segment) (2) reality: What are the basic constituents of reality? What is being? (Metaphysics segment) (3) explanation: What are the principles of change? What are the principles of the universe? (Physics and Cosmology segment). When appropriate, we shall also consider how these thinkers' positions compare and contrast to the views of their contemporaries and predecessors. Prerequisite: One 100 level course in

Philosophy or permission of the instructor. 6 credits, HU; HI, WR2, Spring-S. Jansen
272. Modern Philosophy: Knowledge, God and Free Will Is there any such thing as innate knowledge, or does all knowledge derive from the senses? Does God exist? If so, can we prove God's existence? Do human beings have free will? Philosophers of the seventeenth and eighteenth centuries tackled these perennial questions, providing a new understanding of our world, our place in it and our knowledge of it. We address these questions through examining and evaluating the views of such philosophers, including Descartes, Hume, Kant and distinguished women philosophers. Prerequisite: 100-level philosophy course or permission of the instructor. 6 credits, HI, WR2, Spring-S. Jansen
274. 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, HU; HI, Not offered in 2013-2014
395. The Demands of Morality There is a tremendous amount of suffering in the world. We could all probably do a lot more than we currently do to help alleviate that suffering. Must we, morally speaking, help? More generally, what moral room, if any, is there for us to pursue our own, personal projects even if we could help others more by doing something else? In this course, we will look at these questions by careful examination of Cullity's The Moral Demands of Affluence and several other works on the demands of morality. Prerequisite: Two courses in philosophy or permission of instructor. 6 credits, HI, WR2, IS, Spring-D. Groll
395. Ancient Greek Moral Psychology: Virtue, Character and Happiness What is it to have a good character, and why should we care? For ancient Greek philosophers, character played a central role in human virtue and happiness. However, these thinkers differed widely about the role of emotion, appetite and reason in cultivating and sustaining good character. This course will proceed through a careful study of original Greek texts, including those of Plato, Aristotle, the Stoics and the Epicureans. Interpretive issues will be identified and explored through analysis of texts and secondary literature. Prerequisite: Two previous Philosophy courses. 6 credits, HI, WR2, IS, Fall-S. Jansen
399. 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; NE, Winter-J. Decker
400. Integrative Exercise A colloquium in which seniors defend their senior theses and discuss the senior theses of others. 3 credits, S/NC, ND, Fall, Spring-Staff

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

<a href="https://apps.carleton.edu/curricular/pe/faculty/">Browse faculty and Staff</a>

## 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/AED, Life Guarding, 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

A total of four terms of physical education credit 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 offered each term and may receive a maximum of one Physical Education activity credit per term.

Physical Education credit may be earned for participation in a varsity or club sport that meets the requirements stipulated by the department.Varsity student-athletes may be granted one credit for each varsity sport. For approved club sports, club students-athletes may be granted one credit per academic year. Students may fulfill the required four PE credits for graduation by participating in the same varsity or approved club sport.

## Facilities

Classes and groups meet in the most ideal setting possible, making use of Cowling Gymnasium, Carleton Recreation Center, West Gymnasium, Laird Stadium, Arb and Bell Field Tennis Courts, various outdoor playing fields around the campus and several offcampus 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, one credit per season of participation. Candidates for athletic teams must have a current physical examination within six months 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 extra-curricular environment.

Fall: 3 on 3 Basketball, Ultimate Frisbee, Tennis, Sand Volleyball, Dodgeball, Racquetball

Winter: Broomball, Indoor Soccer, 5x5 Basketball, Floor Hockey, Racquetball, Squash
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, Equestrian, Field Hockey, Fencing, 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-N. Stuckmayer
102. Aikido, Intermediate Empty-hand techniques are continued and weapon techniques are introduced (traditional Japanese wooden weapons are required-cost approximately $\$ 50$.) More varieties of breakfalls are learned as the emphasis of the class shifts to higher-level techniques. Class fee of $\$ 30$ is required. credits, Winter, Spring-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 selfimprovement. 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, Winter, Spring-A.

## Erickson

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, Fall, Winter-A. Erickson
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, 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-G. Kalland
112. Advanced Baseball Advanced skills of the game are introduced, including pitching (including breaking balls), the catching position, advanced infield play, situational hitting and defense, and base running. An
advanced rules test (ungraded) will be given to challenge students' knowledge of the game. credits, Winter-A. Rushing
113. Bowling The social and recreational values of a sport like bowling must be experienced to be appreciated. Students pay a fee per session for three games, equipment rental and bus ride to the lanes. Individual help is given as needed. Bowling does not develop physical fitness, but other skills are involved and can be developed in an atmosphere that encourages social interaction. Open to all levels of experience. credits, Spring-R. Pagel
114. 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, Not offered in 2013-2014
115. 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, Not offered in 2013-2014
116. Diving This class is an introduction to 1 -meter and 3 -meter springboard diving. Students will first learn safety techniques for on the board, in the air, and while entering the water. They will then learn board work hurdles and back presses, "in-air" technique, and "entry" technique. At the end of this course, students will be able to safely execute and perform jumps, dives, flips and/or twists off a diving board and understand and appreciate diving as a participant and observer. Students should have intermediate swimming skills so that they are safe and comfortable in the water. credits, Spring-Staff
117. 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, Not offered in 2013-2014
118. 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, Not offered in 2013-2014
119. Folk Dance Folk dance includes a variety of dances of varying intricacy from around the world. No experience necessary. credits, Fall, Winter, Spring-Staff
120. Hip-hop/House Street Dance Class Students are familiarized with street dance vocabulary and fundamentals. Emphasis on "finding your rhythm" through bodily awareness. Beginners can expect an aerobic workout until their movement becomes looser and more efficient. Excellent for core strength, balance and flexibility. The lessons are 70 minutes each and consist of a group warm-up (ten minutes), stretching (five minutes), hip-hop vocabulary (fifteen minutes), house vocabulary (twenty-five minutes), and choreography (fifteen minutes).No experience necessary. credits, Fall—Staff
121. 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
122. Frisbee, Advanced Ultimate Enhance your skills and abilities in Ultimate. credits, Spring—Staff
123. Golf, Beginning Basic instruction and opportunities to improve your game are provided. All equipment is provided. Experience not necessary. credits, Spring-B. Pagel
124. 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, Fall, Spring-G. Kalland
125. 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 "hard-core" hockey players have no place in this class. credits, Winter-Staff
126. Ice Hockey, Intermediate credits, Winter-Staff
127. 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
128. 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
129. 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 2013-2014
130. 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, Not offered in 2013-2014
131. 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 full-sided games will be incorporated into each session. There is an emphasis on teamwork and enjoyment of the game. credits, Not offered in 2013-2014
132. 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, Not offered in 2013-2014
133. 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
134. 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, Not offered in 2013-2014
135. 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, Not offered in 2013-2014
136. Krav Maga, Beginning Students meet with instructor twice a week to take part in drills that emphasize stopping opponent's attacks and striking quickly with power. General self-defense habits will be discussed with an emphasis on escaping an unarmed assailant. Towards the end of term, students will move from low-contact drills to padded medium-contact drills to provide better training. Students need not have any prior self-defense experience to enroll. 0 credits, Fall-Staff
137. Lifeguarding American Red Cross course that encompasses training in aquatic safety and rescue skills. Upon successful completion of course, participants will receive two certifications: one for A.R.C. Lifeguarding and the second for First Aid, AED/CPR; valid for two years. The course is approximately 35 hours in length, with $80 \%$ of time spent in pool and $20 \%$ in classroom. Required $\$ 50$ textbook and pocket mask fee will automatically be charged on tuition bill. Prerequisite: Student must demonstrate competence in basic swim strokes (front crawl, breaststroke, and sidestroke), ability to tread water (without use of hands/arms) for two minutes and ability to swim underwater. credits, NE, Spring-A. Clark
138. 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
139. 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-D. McCoy
140. 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-D. McCoy
141. 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
142. 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, Fall, Winter, Spring-J. Howard, J. Shockley
143. Outdoor Skills-Adventure 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 back-country experience with guidance in trip planning, plant and animal identification first aid, orienteering shelter building, food planning, packing and prepartion, and an introduction to group dynamics and leadership. Optional outdoor field trip. credits, Spring-J. Keller
144. 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 2013-2014
145. 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 Bouldering Cave. credits, Fall, Winter, SpringStaff
146. Scuba 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
147. Rock Climbing, Advanced This course will teach advanced techniques in rock climbing including sport leading, rappelling, multi-pitch climbing and anchor building. The course is designed for experienced indoor climbers who are interested in making the transition to outdoor climbing as well as outdoor climbers who are looking to improve their knowledge of climbing skills and safety. As an addition, traditional climbing can be added to the curriculum if there is interest. Prerequisite: PE 158. Rock Climbing. credits, NE, Fall-A. Erickson
148. Self Defense for Women 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. Required $\$ 10$ book fee will be automatically charged on tuition bill. credits, Fall—M. Brandl
149. 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, Winter-J. Keller
150. 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
151. 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
152. Social Dance, Winter Ball Course is completed in five weeks - just in time for mid-winter ball. credits, Winter-Staff
153. Squash Students are introduced to this fast-paced racquet sport. Played on a court similar to racquetball, squash involves eye-hand coordination and quick reflexes. In general, the smaller squash ball and longer squash racquet create a game faster and more reactive than its relative, racquetball. This class will cover basic stroke production, rules and strategies of the game. Geared toward beginners, all equipment is furnished credits, Winter-J. Keller
154. 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
155. 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. Plotz
156. Swimming, Instructional Novice to intermediate swim. Introduction to basic swim skills and technique. credits, Fall, Winter, Spring-B. Plotz
157. Sport and Globalization in London and Seville: Introductory Coaching Activity As part of the Introductory Coaching Practicum abroad, students will actively participate in soccer as well as other sport exercises. Designed for students who may or may not have any previous playing or coaching experience, this course will cover introductory methods of coaching and teaching young athletes. Specifically, students will practice methods of teaching skills, structure, and strategies of team-oriented sports. credits, Winter-R.

## Carlson

176. Swimming, Synchronized This class will be an introduction to synchronized swimming. We will teach basic skills, including sculling, eggbeater, hybrids, lifts and figures, during the first part of the course, and we will teach a simple routine during the second part of the course. It will culminate with a small performance. Students should have intermediate swimming skills so that they are safe and comfortable in the water. credits, $N D ; N E$, Spring-Staff
177. 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, Fall, Winter, Spring-Staff
178. 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 wellbalanced 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
179. Table Tennis An introduction to the basics of table tennis. credits, Winter-B. Pagel
180. 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
181. 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-C. Kosiba
182. Water Polo, Beginning This class is designed to introduce you to the exciting sport of Water Polo. From learning how to tread water to shooting a ball, we will cover all the basics of the game of Water Polo. No experience with water polo required, but knowing how to swim is encouraged. Students should have intermediate swimming skills so that they are safe and comfortable in the water. credits, Spring-Staff
183. Water Safety Instructor American Red Cross certification course for those wishing to teach swimming and water safety classes. 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. Required $\$ 50$
textbook and pocket mask fee will be automatically charged on tuition bill. Prerequisite: Students must pass a pre-course 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. credits, Spring-A. Clark
184. Winter Sport 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. Required $\$ 100$ fee for ski trip to Welch Village fee will be automatically charged on tuition bill. credits, Winter-R. Carlson
185. 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, Not offered in 2013-2014
186. 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, Not offered in 2013-2014
187. 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, Spring-C. Kosiba
188. 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-K. Layman, F. Hagstrom
189. Badminton Club An instructional and competitive opportunity to participate in the sport of badminton. Learn and develop new skills, improve your fitness levels, and enjoy club camaraderie. Prerequisite: Participation in Badminton Club fall and winter terms. credits, Spring-A. Chaput
190. Baseball Intercollegiate, Men credits, Spring-A. Rushing
191. Basketball Intercollegiate, Men credits, Winter-G. Kalland
192. Basketball Intercollegiate, Women credits, Winter-C. Kosiba
193. Competitive Dance Club Participants will practice techniques and moves for dances including: Waltz, Quickstep, Cha Cha, Swing, as well as other styles. Dancers will learn techniques through a general progression throughout practices. There will be sessions for newcomers, which will teach the basics of dance. There will also be sessions for intermediate and advanced dancers, which will be taught by a professional dance teacher and returning members. credits, Winter-A. Chaput
194. Cross Country Intercollegiate, Men credits, Fall-D. Ricks
195. Cross Country Intercollegiate, Women credits, Fall—D. Ricks
196. Cycling Club credits, Spring-A. Chaput
197. Field Hockey Club, Co-ed credits, Not offered in 2013-2014
198. Football Intercollegiate credits, Fall-B. Pagel
199. Ultimate Frisbee Club, CUT and GOP credits, Spring-A. Chaput
200. Ultimate Frisbee Club, Syzygy and Eclipse credits, Spring-A. Chaput
201. Golf Intercollegiate, Men credits, Fall-G. Ericksen
202. Golf Intercollegiate, Women credits, Fall-E. Seiger
203. Ice Hockey Club, Men credits, Winter-Staff
204. Ice Hockey Club, Women credits, Winter-Staff
205. Lacrosse Club, Men credits, Spring—Staff
206. Lacrosse Club, Women credits, Spring-Staff
207. Rugby Club, Men credits, Spring-Staff
208. Rugby Club, Women credits, Spring-Staff
209. Sailing Club credits, Spring-Staff
210. Nordic Ski Club credits, Winter-Staff
211. Alpine Ski Club credits, Winter-Staff
212. Soccer Intercollegiate, Men credits, Fall-B. Carlson
213. Soccer Intercollegiate, Women credits, Fall—J. Keller
214. Softball Intercollegiate, Women credits, Spring-A. Erickson
215. Swimming/Diving Intercollegiate, Men credits, Winter-A. Clark
216. Swimming/Diving Intercollegiate, Women credits, Winter-A. Clark
217. Synchro Swim Club credits, Winter-A. Chaput
218. Tennis Intercollegiate, Men credits, Spring-S. Zweifel
219. Tennis Intercollegiate, Women credits, Spring-L. Battagalini
220. Tennis Club credits, Spring-Staff
221. Track and Field/Indoor Intercollegiate, Men credits, Winter-D. Ricks
222. Track and Field/Indoor Intercollegiate, Women credits, Winter—D. Ricks
223. Track and Field/Outdoor Intercollegiate, Men credits, Spring—D. Ricks
224. Track and Field/Outdoor Intercollegiate, Women credits, Spring-D. Ricks
225. Volleyball Club, Men credits, Winter-Staff
226. Sport and Globalization in London and Seville: Directed Reading and Volunteer Coaching Project Prior to departure students will read selected works that highlight the sporting and cultural history of Great Britain and Spain. Understanding of these readings will be evaluated through discussion and written work in London and Seville. In addition, in order to introduce students to coaching youth, part of the pre-trip preparation will include a community service project where students will conduct a practice session with a youth group. 2 credits, $S / C R / N C, N D ; N E$, Winter-R. Carlson
227. Volleyball Intercollegiate, Women credits, Fall-H. Jaynes

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

316. 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
317. Foundations of Sport Psychology and Performance Mentality Research shows that the most successful athletes are those who are able to think consciously and engage differently than others before, during, and after competition. Like any other life skill, thinking differently and embracing active mindfulness takes training, a willingness to learn, and dedicated hard work. This course is designed to help students and athletes think differently about various aspects of training and competition, ultimately using these skills as they apply to sport, functioning in team environments, and most importantly to the other areas of their lives outside of athletics during and beyond their time at Carleton. 6 credits, ND; NE, Winter-J. Mueller
318. Sport and Globalization in London and Seville: Global Athletics Given their deep history and current success on the world stage, English and Spanish soccer teams will serve as a framework to examine the emergence of contemporary sport and the current issues facing participants, coaches, administrators, and spectators. Students will develop an understanding of the relationship between soccer tactics, coaching philosophies, and club and national team traditions that influence each society's sporting and soccer culture. 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 facing each society. 6 credits, ND; NE, Winter-R.

## Carlson

340. Introductory Coaching Practicum Designed for students who may or may not have any previous playing or coaching experience, this course will cover introductory methods of coaching and teaching young athletes. Specifically, students will practice methods of teaching skills, structure, and strategies of team-oriented sports. Emphasis will be placed on understanding the coaching profession at different levels, developing coaching skills and creating a philosophy of coaching in a cross-cultural setting. 4 credits, ND; NE, Winter-R. Carlson
341. Contemporary Issues in 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, Fall—L. Battaglini
342. 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-A. Rushing

## PHYSICS AND ASTRONOMY

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 problemsolving 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 and 131 or 132 or 141 or 142, 228, 229, 230, 235, 335 (or 336 and 337), 342, and 400, plus one applied physics course. (Choose from the following: Physics 234, 260, 261, 341, 343, 344, 347 or 354; Astronomy 232 or 233, Biology 360, ENTS 262 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, 340, 352, 355, 356, Astronomy 113, 356, Chemistry 123, Mathematics 241, 341, 351, and Computer Science 111. Students considering graduate school in physics are strongly encouraged to take Physics 346, 352 and 355.

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 131, 132, 141, 142, 151, 153, 162 or 165. 6 credits, MS; NE, QRE, Not offered in 2013-2014
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, 162 or 165. 1 credits, S/CR/NC, ND; NE, SpringK. Martin-Wells
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, MS; LS, QRE, Fall, Winter, Spring-J. Tasson, B. Titus
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, MS; LS, QRE, Not offered in 2013-2014
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 (completion or concurrent registration) and strong preparation in Newtonian Mechanics. 3 credits, MS; LS, QRE, Winter-K. Martin-Wells
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 (completion or concurrent registration) and strong preparation in physics. 3 credits, MS; LS, QRE, Fall-J. Coats
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. Prerequisite: Mathematics 121 (completion or concurrent registration) and Physics 131 (completion or concurrent registration) or 132 or 141 or 142. 3 credits, MS; LS, QRE, Fall, Winter, Spring-N. Christensen, J. Tasson, W. Titus
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. Prerequisite: 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. Weisberg
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, Fall-C. Blaha
129. Introduction to Electricity, Magnetism, and Optics A study of the principles of electricity, magnetism, and optics with an emphasis on real-world applications including electronics, laser physics, astronomy, and medicine. Topics include electric and magnetic fields, electric potentials, DC and AC circuits, geometric and wave optics, and relevant properties of matter. 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. Prerequisite: Physics 131 or 132 or 141 or 142, Mathematics 121.6 credits, MS; LS, QRE, Winter-J. Coats
130. 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, or 165. 2 credits, S/CR/NC, ND, Not offered in 2013-2014
131. 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 151. 6 credits, MS; LS, QRE, Fall-N. Christensen
132. 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. Prerequisite: Physics 131, 132, 141, or 142 and Mathematics 211; or permission of the instructor. 3 credits, MS; NE, Winter-J. Tasson
133. 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. Tasson
134. 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. Prerequisite: Physics 228 and Physics 229/230 or permission of the instructor. 6 credits, MS; NE, QRE, Offered in alternate years, Spring-J. Weisberg
135. 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, Not offered in 2013-2014
136. Computer Simulations in Complex Physical Systems The development of techniques to study complex physical systems from a probabilistic and numerical standpoint using Mathematica. Subject material is applicable to all the sciences and mathematics. Some topics considered are random walks, percolation clusters, avalanches, traffic flow, the spread of forest fires and diseases, and a brief introduction to Bayesian statistics. No Mathematica skills are assumed. Prerequisite: Physics 131,132,141 or 142 or permission of instructor. 6 credits, MS; LS, QRE, Offered in alternate years, Not offered in 2013-2014
137. 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. Prerequisite: Physics 151, 161 or 165 and Mathematics 211; or permission of the instructor. 6 credits, MS; LS, QRE, Spring-K. Martin-Wells
138. 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, Not offered in 2013-2014
139. Materials Science From a simple "Post-lt" 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. Prerequisite: Physics 151, 152, 153, or 165 or Chemistry 123 or 128.6 credits, MS; NE, Not offered in 2013-2014
140. 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, 152, 153, or 165. 6 credits, MS; NE, Not offered in 2013-2014
141. Biophysics This course explores how physical principles apply to living systems and how developments in physics have impacted the biological sciences. Applications are made to the work that biophysicists do to understand human biology, to treat and cure diseases, and to develop alternative energy resources. Prerequisite: Physics 151, 152, 153, or 165.6 credits, NE, Spring-J. Coats
142. Quantum Mechanics 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. Multidimensional applications will include the harmonic oscillator, the hydrogen atom. Approximation techniques and applications will be presented. Prerequisite: Physics 228, 229/230 and Mathematics 232. Familiarity with matrix algebra is assumed. 6 credits, MS; NE, Winter-B. Titus
143. 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, Not offered in 2013-2014
144. 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, Not offered in 20132014
145. 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. Prerequisite: Physics 228. 3 credits, MS; NE, Not offered in 2013-2014
146. 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. Prerequisite: Physics 339. 3 credits, MS; NE, Not offered in 2013-2014
147. 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, Winter-C. Blaha
148. 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 Physics 235. 6 credits, MS; LS, QRE, Spring-M. Eblen-Zayas
149. 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, Fall-M. Eblen-Zayas
150. 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. Prerequisite: Physics 235 and Mathematics 232. 6 credits, MS; NE, Offered in alternate years, Not offered in 2013-2014
151. Advanced Optics 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, Offered in alternate years, Not offered in 2013-2014
152. Thermodynamics and Statistical Mechanics The fundamentals of classical thermodynamics and statistical mechanics. Topics include the laws of thermodynamics; heat engines and refrigerators; the MaxwellBoltzmann distribution; the various canonical distributions; the statistical concepts of temperature and entropy; Fermi-Dirac, and Bose-Einstein distributions with applications to black-body radiation, phonons, and electrons in solids; the Ising model; and an introduction to critical phenomena. Prerequisite: Physics 228. 6 credits, MS; NE, Fall-W. Titus
153. General Relativity Einstein's theory of general relativity is developed from basic physical principles. Also presented is the mathematics of curved space time. Astrophysical applications of general relativity, including spherically symmetric objects, black holes, cosmology and the creation and detection of gravitational waves are given. Prerequisite: Physics 230 and 235. 6 credits, MS; NE, Winter-N. Christensen
154. Introduction to Quantum Field Theory Building from the marriage of special relativity and quantum mechanics, the course will examine the structure of relativistic quantum field theory. Possible topics may include the Dirac field, Feynman diagrams and perturbation theory in quantum electrodynamics, renormalization, and select applications in particle physics and condensed-matter physics. The course may also consider current challenges in the field such as that presented by gravity. Prerequisite: Physics 336/337 or Physics 335. 6 credits, MS; NE, Not offered in 2013-2014
155. Advanced Electricity and Magnetism The classical theory of fields and waves. Electromagnetic theory including Maxwell's equations, radiation and relativity. Prerequisite: Physics 235 and Mathematics 341 strongly recommended. 6 credits, MS; NE, Spring-J. Tasson
156. 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. Prerequisite: Physics 335, 336, 339 or 346. 6 credits, MS; NE, Offered in alternate years, Not offered in 2013-2014
157. Topics in Advanced Classical Mechanics Lagrangian and Hamiltonian methods including central force motion, coupled harmonic oscillators, and the study of continuous systems. Additional subjects may include fluid dynamics, classical field theory or other specialized topics. Prerequisite: Physics 229 and 230. 6 credits, MS; NE, Offered in alternate years, Not offered in 2013-2014
158. 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
159. 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, Winter, Spring-Staff

## Astronomy Courses

100. Cosmology: A Beginner's Guide to the Universe A discussion of the changing view of our place in space, from the cosmologies of ancient civilizations to the twenty-first century picture of an accelerating universe. Topics will include basic principles of General Relativity, black holes and the curvature of space, and speculations about the ultimate fate of the universe. Designed to appeal to a wide audience of "cosmic thinkers," including both science and non-science majors. Some evening observing sessions will provide opportunity for viewing with the telescopes. Prerequisites: high school algebra and trigonometry. 6 credits, AI, WR1, Fall-C. Blaha
101. 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; LS, QRE, Fall, Winter-K. Martin-Wells, J. Weisberg
102. 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, or permission of the instructor. 3 credits, S/CR/NC, MS; LS, QRE, Fall, Spring-C. Blaha, J. Weisberg
103. Topics in Modern Astrophysics Special topics in modern astrophysics will be explored in order to understand the physical processes at work in a variety of cosmic settings. Possible topics include the solar weather and its impact on Earth, extra-solar planets, black holes, dark matter, gravitational lensing, large-scale structures and dark energy in an accelerating universe. Prerequisite: Astronomy 100, 110 or Physics 131, 132, 141 or 142.6 credits, MS, WR; NE, WR2, QRE, Not offered in 2013-2014
104. 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. Prerequisite: Physics 228 and Physics 229/230 or permission of the instructor. 6 credits, MS; NE, QRE, Offered in alternate years, Spring-J. Weisberg
105. 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, Not offered in 2013-2014
106. 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, $S / C R / N C, M S$, Fall, Winter, Spring-Staff

## POLITICAL ECONOMY CONCENTRATION

<a href="https://apps.carleton.edu/curricular/poec/faculty/">Browse faculty and Staff</a>

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 macro-level 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.

Students who double major in Economics and Politcal Science or Political Scinece/IR are not permitted to declare a concentration in Political Economy.

Lower Level Course Requirements (four courses required):
All three of the following:
ECON 110 Principles of Macroeconomics
ECON 111 Principles of Microeconomics
POSC 265 Capitalist Crises, Power and Policy (Not offered in 2013-2014)
or
POSC 263 European Political Economy
plus one course from:
ECON 250 History of Economic Ideas
HIST 141 Europe in the Twentieth Century (Not offered in 2013-2014)
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 2013-2014)
POSC 201 National Policymaking
SOAN 220 Class, Power, and Inequality in America (Not offered in 2013-2014)
or World Trade and Development
ECON 240 Microeconomics of Development
ECON 241 Growth and Development (Not offered in 2013-2014)
ECON 280 International Trade
ECON 281 International Finance
POSC 266 Urban Political Economy
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 20132014)

ECON 242 Economics of Education (Not offered in 2013-2014)
ECON 243 Economic Demography (Not offered in 2013-2014)
ECON 246 Economics of Welfare (Not offered in 2013-2014)
ECON 262 The Economics of Sports (Not offered in 2013-2014)
ECON 264 Health Care Economics

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
ECON 278 Industrial Organization and Firm Behavior
ECON 282 Investment Finance (Not offered in 2013-2014)
POSC 222 The Politics of Food: Producers, Consumers and Citizenship
POSC 231 American Foreign Policy (Not offered in 2013-2014)
POSC 288 Washington D.C.: A Global Conversation Part I (Not offered in 2013-2014)
POSC 289 Washington D.C. Seminar: A Global Conversation Part II (Not offered in 20132014)

POSC 293 Washington D.C. Seminar: Global Conservation Internship (Not offered in 2013-2014)
POSC 366 Urban Political Economy* (Not offered in 2013-2014)
SOAN 210 Principles of Demography (Not offered in 2013-2014)
SOAN 215 Social Welfare (Not offered in 2013-2014)
SOAN 221 Law and Society (Not offered in 2013-2014)
SOAN 229 Demography of the Family (Not offered in 2013-2014)
SOAN 280 Statistical Tools for Quantitative Reasoning (Not offered in 2013-2014) World Trade and Development:
ECON 221 Cambridge Program: Contemporary British Economy
ECON 222 Cambridge Program: The Industrial Revolution in Britain
ECON 233 European Economic History
ENTS 271 Environmental Economics and Policy
HIST 257 Urban History in Beijing and Beyond Program: History of Urban China and Korea
HIST 347 The Global Cold War
POSC 244 The Politics of the Celtic Fringe (Not offered in 2013-2014)
POSC 264 Politics of Contemporary China
POSC 267 Comparative Foreign Policy (Not offered in 2013-2014)
POSC 268 Global Environmental Politics and Policy
POSC 322 Neoliberalism and the New Left in Latin America*
POSC 333 Global Social Changes and Sustainability* (Not offered in 2013-2014)
POSC 338 Politics of Inequality and Poverty*
POSC 364 Capitalism and Its Critics*
POSC 383 Identity and Belonging in the New Europe: Politics of the European
SOAN 234 Ecology, Economy, and Culture (Not offered in 2013-2014)
SOAN 239 Explorations in Social Data Analysis
SOAN 280 Statistical Tools for Quantitative Reasoning (Not offered in 2013-2014)
Upper Level Seminar Requirement: (one course)
POSC 322 Neoliberalism and the New Left in Latin America*
POSC 361 Approaches to Development*
POSC 364 Capitalism and Its Critics*
POSC 365 Political Economy of Global Tourism*
POSC 366 Urban Political Economy* (Not offered in 2013-2014)

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 departmentâ??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 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 ( 12 credits):

MATH 115 Introduction to Statistics, MATH 215 Introduction to Probability and Statistics, MATH 245 Applied Regression Analysis, MATH 265 Probability, MATH 275 Introduction to Statistical inference ( 6 credits) or MATH Stats AP score of 4 or 5 . Math courses may be taken on an elective S/CR/NC basis.

POSC 230: Methods of Political Research ( 6 credits) This course should be taken as soon as possible after declaring a major, but not simultaneously with the math class listed above.
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 off-campus 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. (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 studentâ??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 <br> Coordinator: Associate Professor Devashree Gupta

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, MATH 245 Applied Regression Analysis, MATH 265 Probability, MATH 275 Introduction to Statistical Inference ( 6 credits) or MATH Stats AP score of 4 or 5 . Math courses may be taken on an elective S/CR/NC basis.

POSC 230 Methods of Political Research ( 6 credits) This course should be taken as soon as possible after declaring a major, but not simultaneously with the Math class listed above.
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

HIST 138 Crusades, Mission, and the Expansion of Europe
HIST 281 War in Modern Africa (Not offered in 2013-2014)
HIST 347 The Global Cold War
POSC 204 Media and Electoral Politics: 2010 United States Election (Not offered in 2013-2014)
POSC 208 The American Presidency (Not offered in 2013-2014)
POSC 220 Politics and Political History in Film (Not offered in 2013-2014)
POSC 226 Political Psychology (Not offered in 2013-2014)

POSC 228 Foucault: Bodies in Politics (Not offered in 2013-2014)
POSC 231 American Foreign Policy (Not offered in 2013-2014)
POSC 236 Global, National and Human Security
POSC 239 The Diplomat's Craft: Three Case Studies
POSC 240 On America and Its Wars
POSC 241 Ethnic Conflict
POSC 248 The U.S.-Chinease Relationship
POSC 250 Ancient Political Philosophy (Not offered in 2013-2014)
POSC 252 Herodotus and the Origin of Political Philosophy (Not offered in 2013-2014)
POSC 259 Justice Among Nations (Not offered in 2013-2014)
POSC 267 Comparative Foreign Policy (Not offered in 2013-2014)
POSC 274 Political Psychology of Presidential Foreign Policy Decision Making
POSC 285 The U.S. Intelligence Community
POSC 288 Washington D.C.: A Global Conversation Part I (Not offered in 2013-2014)
POSC 289 Washington D.C. Seminar: A Global Conversation Part II (Not offered in 20132014)

POSC 293 Washington D.C. Seminar: Global Conservation Internship (Not offered in 2013-2014)
POSC 328 Foreign Policy Analysis*
POSC 330 The Complexity of Politics* (Not offered in 2013-2014)
POSC 350 Ancient Political Philosophy (Not offered in 2013-2014)
POSC 351 Political Theory of Martin Luther King, Jr. (Not offered in 2013-2014)
RELG 265 Religion and Violence: Hindus, Muslims, Jews
SOAN 236 Introduction to Peace Studies (Not offered in 2013-2014)
WGST 234 Feminist Theory (Not offered in 2013-2014)
WGST 240 Gender, Globalization and War (Not offered in 2013-2014)
b) Global Development and Sustainability

ECON 240 Microeconomics of Development
ECON 241 Growth and Development (Not offered in 2013-2014)
ECON 274 Labor Economics
ECON 275 Law and Economics
ECON 280 International Trade
ECON 281 International Finance
ENTS 271 Environmental Economics and Policy
ENTS 310 Topics in Environmental Law and Policy
HIST 262 Public Health: History, Policy, and Practice
POSC 212 Environmental Justice (Not offered in 2013-2014)
POSC 222 The Politics of Food: Producers, Consumers and Citizenship
POSC 223 Food Justice
POSC 253 Marxist Political Thought
POSC 263 European Political Economy
POSC 264 Politics of Contemporary China
POSC 265 Capitalist Crises, Power, and Policy (Not offered in 2013-2014)
POSC 266 Urban Political Economy
POSC 268 Global Environmental Politics and Policy
POSC 288 Washington D.C.: A Global Conversation Part I (Not offered in 2013-2014)
POSC 330 The Complexity of Politics* (Not offered in 2013-2014)
POSC 333 Global Social Changes and Sustainability* (Not offered in 2013-2014)

POSC 338 Politics of Inequality and Poverty*
POSC 361 Approaches to Development*
POSC 364 Capitalism and Its Critics*
POSC 365 Political Economy of Global Tourism*
POSC 366 Urban Political Economy* (Not offered in 2013-2014)
SOAN 234 Ecology, Economy, and Culture (Not offered in 2013-2014)
c) Democracy, Society, and the State

LTAM 370 Brazil Culture and Politics (Not offered in 2013-2014)
POSC 201 National Policymaking
POSC 202 Parties, Interest Groups and Elections (Not offered in 2013-2014)
POSC 203 Political Communication: Election Campaign Advertising and Public Opinion
POSC 205 Issues in American Democracy (Not offered in 2013-2014)
POSC 209 Place, Politics, and Citizen Mobilization
POSC 214 Visual Representations of Political Thought and Action (Not offered in 20132014)

POSC 215 Political Communication in Comparative Context (Not offered in 2013-2014)
POSC 218 Schools, Scholarship and Policy in the United States (Not offered in 20132014)

POSC 219 Protest, Power \& Grassroots Organizing: American Social Movements (Not offered in 2013-2014)
POSC 221 Latin American Politics (Not offered in 2013-2014)
POSC 237 Southeast Asian Politics
POSC 238 Sport \& Globalization London/Seville Pgm: Globalization and Development: Lessons from Int'l Football
POSC 244 The Politics of the Celtic Fringe (Not offered in 2013-2014)
POSC 247 Identity and Belonging in the New Europe: Comparative Nationalism
POSC 250 Ancient Political Philosophy (Not offered in 2013-2014)
POSC 251 Modern Political Philosophy: Modernity and Its Discontents
POSC 254 Freedom, Excellence, Happiness: Aristotle's Ethics
POSC 255 Post-Modern Political Thought (Not offered in 2013-2014)
POSC 261 Power, Freedom, and Resistance. (Not offered in 2013-2014)
POSC 267 Comparative Foreign Policy (Not offered in 2013-2014)
POSC 269 Issues in Postmodern Political Thought
POSC 272 Constitutional Law II
POSC 276 Arendt: Imagination and Politics (Not offered in 2013-2014)
POSC 281 Global Society: An Approach to World Politics (Not offered in 2013-2014)
POSC 289 Washington D.C. Seminar: A Global Conversation Part II (Not offered in 20132014)

POSC 293 Washington D.C. Seminar: Global Conservation Internship (Not offered in 2013-2014)
POSC 303 Political Communication: Election Campaign Advertising and Public Opinion*
POSC 313 Legal Issues in Higher Education
POSC 322 Neoliberalism and the New Left in Latin America*
POSC 330 The Complexity of Politics* (Not offered in 2013-2014)
POSC 348 Strangers, Foreigners and Exiles* (Not offered in 2013-2014)
POSC 350 Ancient Political Philosophy (Not offered in 2013-2014)
POSC 350 Montesquieu (Not offered in 2013-2014)
POSC 352 Political Theory of Alexis de Tocqueville*

POSC 355 Identity, Culture and Rights*
POSC 358 Comparative Social Movements*
POSC 359 Cosmopolitanism* (Not offered in 2013-2014)
POSC 371 Modern Political Philosophy: Modernity and Its Discontents
POSC 383 Identity and Belonging in the New Europe: Politics of the European
RELG 264 Islamic Politics (Not offered in 2013-2014)
SOAN 221 Law and Society (Not offered in 2013-2014)
SOAN 225 Social Movements (Not offered in 2013-2014)
SOAN 283 Immigration and Immigrants in Europe and the United States (Not offered in 2013-2014)
Approved Area Studies Courses
AMST 230 The American Sublime: Landscape, Character \& National Destiny in Nineteenth Century America (Not offered in 2013-2014)
ECON 233 European Economic History
EUST 100 Allies or Enemies? America through European Eyes
HIST 138 Crusades, Mission, and the Expansion of Europe
HIST 139 Foundations of Modern Europe (Not offered in 2013-2014)
HIST 140 The Age of Revolutions: Modern Europe, 1789-1914
HIST 141 Europe in the Twentieth Century (Not offered in 2013-2014)
HIST 152 History of Early China (Not offered in 2013-2014)
HIST 153 History of Modern China (Not offered in 2013-2014)
HIST 156 History of Modern Korea
HIST 161 History of Modern India, c. 1700-1047
HIST 165 Islam and Muslims in the Modern World
HIST 167 History of Modern South Asia 1947-Onward
HIST 170 Modern Latin America 1810-Present
HIST 180 An Historical Survey of East Africa (Not offered in 2013-2014)
HIST 181 West Africa in the Era of the Slave Trade (Not offered in 2013-2014)
HIST 182 Living in the Colonial Context: Africa, 1850-1950
HIST 184 Colonial West Africa (Not offered in 2013-2014)
HIST 241 Russia through Wars and Revolutions
HIST 243 The Peasants are Revolting! Society and Politics in the Making of Modern
France (Not offered in 2013-2014)
HIST 249 Two Centuries of Tumult: Modern Central Europe (Not offered in 2013-2014)
HIST 250 Modern Germany
HIST 254 Colonialism in East Asia (Not offered in 2013-2014)
HIST 255 Print Culture and Nationalism in East Asia (Not offered in 2013-2014)
HIST 256 History of Urban China
HIST 257 Urban History in Beijing and Beyond Program: History of Urban China and
Korea
HIST 260 The Making of the Modern Middle East
HIST 265 Central Asia in the Modern Age
HIST 266 History of Islam in India (Not offered in 2013-2014)
HIST 272 The Mexican Revolution (Not offered in 2013-2014)
HIST 276 The African Diaspora in Latin America (Not offered in 2013-2014)
HIST 278 The Spanish Inquisition (Not offered in 2013-2014)
HIST 280 African in the Arab World (Not offered in 2013-2014)
HIST 281 War in Modern Africa (Not offered in 2013-2014)

HIST 286 Africans in the Arab World: On Site and Revisited (Not offered in 2013-2014)
HIST 360 Muslims and Modernity (Not offered in 2013-2014)
HIST 386 Disease, Health, and Healing in Modern African History (Not offered in 20132014)

POSC 122 Politics in America: Liberty and Equality
POSC 221 Latin American Politics (Not offered in 2013-2014)
POSC 237 Southeast Asian Politics
POSC 264 Politics of Contemporary China
RELG 255 Social Engagement in Asian Religions
RELG 262 Islamic Africa (Not offered in 2013-2014)
RELG 264 Islamic Politics (Not offered in 2013-2014)
SOAN 157 Culture and Politics in India (Not offered in 2013-2014)
SOAN 161 Imagining Indonesia: Pluralism and Unity (Not offered in 2013-2014)
SOAN 256 Ethnography of Africa (Not offered in 2013-2014)
SOAN 257 Culture and Politics in India (Not offered in 2013-2014)
SOAN 261 Imagining Indonesia: Pluralism and Unity (Not offered in 2013-2014)
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 studentâ??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 nonCarleton program that includes a significant political component. This may include study in our Madrid/Maastricht program 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 off-campus 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, SI, IS, Fall, Spring-D. Gupta, K. Freeeze, 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, Spring-R. 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, Spring-L. Cooper, P. Petzschmann
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, SI, IS, Fall, Winter-G. Marfleet, T. Myint
124. National Policymaking We will explore factors that influence public policy in the U.S., beginning with the politics of the policy formation process, including nongovernmental actors (corporations, media, nonprofit organizations, citizens, interest groups), and major governmental institutions. We will discuss fundamental American political concepts such as liberty, power, and democracy, and the role of citizens. Our goals are to increase understanding of the wide array of political factors that determine the feasibility and/or desirability of a particular course of action in response to a perceived problem, and to evaluate the status of various kinds of knowledge claims, including sources of credibility. Prerequisite: Political Science 122 or sophomore standing. 6 credits, SS; SI, IDS, Spring-P. Cavanaugh
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, Not offered in 2013-2014
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, SI, IS, QRE, Offered in alternate years, Fall-B. Allen
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 using our multi-year data set of content analyzed election ads and news. We study a variety of quantitative and qualitative research methods to learn how political communication affects U.S. elections. 6 credits, SS; SI, QRE, Offered in alternate years, Not offered in 2013-2014
128. Issues in American Democracy Crosslisted with POSC 305. 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, Not offered in 2013-2014
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, Not offered in 2013-2014
130. 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 institutions in the American and international political systems. Particular attention will be devoted to the presidencies of Barack Obama and George W. Bush. 6 credits, SS; SI, IDS, Offered in alternate years, Not offered in 2013-2014
131. Place, Politics, and Citizen Mobilization Citizen mobilization often centers around environmental problems or other controversies about the shape of community landscapes. We will explore concepts of democracy, power, identity, and sense of place as we examine cases of citizen mobilization. The class will research a current case study of an environmental controversy that gave rise to citizen mobilization. When and why do people in a community mobilize? What are the obstacles to community-based political action? How do local communities mobilize to meet the challenge of broader issues, such as climate change? Are the Occupy protests similar to community-based mobilization? 6 credits, SS; SI, IDS, Winter-P. Cavanaugh
132. 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, IDS, QRE, Not offered in 2013-2014
133. 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, Not offered in 2013-2014
134. 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, Not offered in 2013-2014
135. International Issues in U.S. Politics How does the broader world figure in American national politics? This course examines the impact of international conditions on American public opinion and political leaders. Topics include the roles of national security strategy, globalization, active minorities, national identity, and perceptions of other nations in America's domestic politics. 6 credits, SI, IS, Offered in alternate years, Not offered in 2013-2014
136. 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, Not offered in 2013-2014
137. Protest, Power \& Grassroots Organizing: American Social Movements 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, Not offered in 2013-2014
138. 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 non-fiction 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, Not offered in 2013-2014
139. 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 U.S.Latin American relations. 6 credits, SS; SI, IS, Offered in alternate years, Not offered in 2013-2014
140. The Politics of Food: Producers, Consumers and Citizenship Although what we eat everyday is familiar and biologically intimate, it is also a part of a complex political system. In this course we will learn about and reflect upon the political aspects of food in the U.S. Topics include food history, agribusiness, local food movements, food policy, and social justice. What influences the way we eat? How did ignorance about food become the norm in the U.S.? The course will include guest speakers and possibly field trips. 6 credits, $\operatorname{SS}$; SI, IDS, Spring-P. Cavanaugh
141. Food Justice Systems for growing, processing and distributing food have been subject to claims that they are unjust, yet problems persist. This course will examine concepts of justice and apply them to issues related to farmworkers, factory works and others who produce our food, poverty and access to food, and genetically modified organisms as they relate to control of production. We will ask how justice relates to sustainability. Although the course will focus on the United States, global issues such as immigration and food sovereignty will be included. Students will have the opportunity to explore food justice issues in other countries. 6 credits, SI, IS, Spring-P. Cavanaugh
142. 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 2013-2014
143. Foucault: Bodies in Politics Are human bodies the sites where political power is constituted and legitimized? Are they sites of resistance and change, through which the construction of alternative identities and forms of discourse is incited and made possible? Drawing on philosophical, historical, and literary resources this course will explore different ways in which human bodies become politically significant. While the course will take its leading idea from Foucault's notion of biopolitics, it will expand its approach in a direction that will include feminist perspectives, as well as prison memories from survivors and witnesses of totalitarian/authoritarian political regimes. 6 credits, SS; HI, Offered in alternate years, Not offered in 2013-2014
144. 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 $115,215,245,265,275$ or AP Statistics (score of 4 or 5). 6 credits, ND, WR; SI, WR2, QRE, Fall, Winter, Spring-G. Marfleet, K. Freeze
145. 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, Not offered in 2013-2014
146. Global, National and Human Security What are the greatest threats to national and global security? In this course we will explore a range of traditional security topics including: the proliferation of WMDs, terrorism, piracy, insurgencies, arms races, territorial disputes and strategic rivalries. In addition to these classic concerns, we also consider newer ones such as cyber-security, the threat of global pandemics, unmanned warfare and the impact of climate change. Our study begins and concludes with the debate over the concept of security in the twenty-first century. 6 credits, SI, IS, Spring-G. Marfleet
147. 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, $S S, W R$; SI, WR2, IS, QRE, Spring-T. Myint

## 238. Sport \& Globalization London/Seville Pgm: Globalization and Development: Lessons from Int'I

Football This course uses international football (soccer) as a lens to analyze topics in globalization, such as immigration and labor, inequality, foreign investment, trade in services, and intellectual property. Students will be presented with key debates in these areas and then use cases from international football as illustrations. Focusing on the two wealthiest leagues in Europe, the English Premier League and the Spanish Liga, students will address key issues in the study of globalization and development, and in doing so enhance their understanding of the world, sports, and sport's place in the world. 6 credits, SS; SI, IS, Winter-Non-Carleton Faculty
239. 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, Fall-B. Levin
240. On America and Its Wars From a nation which prided itself on remaining aloof from the intrigues and struggles of foreign powers, the United States over the past century has become regularly involved in a series of major and limited wars. The course will examine a number of\ these conflicts and the debates that\ surrounded them in the hope of discerning\ the\ influence they may have on America's ongoing role and behavior in the international arena. 3 credits, SI, IS, Spring-B. Levin
241. 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, QRE, Winter-D. Gupta
244. The Politics of the Celtic Fringe This class will examine recent political, economic and social transformations that have occurred in the so-called Celtic Fringe: Scotland, Ireland, Cornwall, Wales and Galicia. We will use these regions, which have long occupied marginal positions within much larger and more powerful states, as cases to explore a variety of issues, including center-periphery relations, migration, internal colonialism, autonomous and separatist movements, and regionalism in the context of the European Union. 6 credits, SS; SI, IS, Not offered in 2013-2014
247. Identity and Belonging in the New Europe: Comparative Nationalism This class uses the experiences of different European countries as a lens to examine the role of nationalism in contemporary politics, particularly how societies construct national identities and who does (and does not) belong to that national community. In the classroom portion of this seminar, students will be introduced to the theory and practice of nationalism as well as some of its contemporary manifestations. We will also examine the activities of European separatist movements, including the 2014 referendum on Scottish independence from the UK. 6 credits, ND; SI, IS, Spring-D. Gupta
248. The U.S.-Chinease Relationship This course will examine the interaction between China and America from the inception in the late eighteenth century to the present, with greater emphasis on more recent events. The focus will be on evaluating the underlying and persisting factors which have made Sino-U.S. relations so special and difficult. 3 credits, SI, IS, Spring-B. Levin
250. 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, SS; HI, Offered in alternate years, Not offered in 2013-2014
251. Modern Political Philosophy: Modernity and Its Discontents Crosslisted with POSC 371. The philosophers who launched the modern age thought that humanity could achieve security and prosperity if people's concerns were directed away from transcendent longings (which often resulted in fanaticism and conflict) toward lower and more attainable ends. That project has borne impressive fruit. But it has also, almost from the beginning, stirred a restless discontent that has sometimes erupted in the form of utopian ideologies and totalitarian horrors. In this course we will study both those who helped launch the modern project (Hobbes, Spinoza, and/or Locke) and its most powerful critics (Rousseau, Nietzsche). 6 credits, HI, IS, Fall-L. Cooper
252. Herodotus and the Origin of Political Philosophy This course will be devoted to close study of Herodotus' Histories, a rich and delightful book that defies easy description. Herodotus has much to teach us about great questions of freedom and despotism, war and peace, and empire. He was also arguably the first great thinker to explore cultural diversity and the larger questions it raises, including questions of particularism versus universalism and nature versus convention. Students will write three 7-8 page papers and give informal class presentations. 6 credits, SS; HI, Not offered in 2013-2014
253. Marxist Political Thought This discussion seminar introduces key texts of Karl Marx and Friedrich Engels as well as the writings of Marxists since Marx's death, such as Lenin, Gramsci, Bernstein and others. The course will address concepts in their writings such as alienation, historical materialism, class, the state, science and ideology, socialism and social democracy. While a lot of attention is paid to Marxist theory, we will also consider the political contexts in which theories and debates emerged and their implications for political practice. 6 credits, SI, IS, Spring-P. Petzschmann
254. 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 multi-layered book, and one that reveals more to those who study it with care. 6 credits, SS; SI, Offered in alternate years, Spring-L. Cooper
255. 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, Not offered in 2013-2014
259. Justice Among Nations This course will attempt to bring to bear great works of political philosophy on the central questions of international relations, questions concerning both the moral basis of power and the character of international politics. Readings will be drawn from ancient and modern political philosophy and will culminate in an analysis and evaluation of contemporary international relations theory in light of these earlier thinkers. 6 credits, SS; SI, Not offered in 2013-2014
261. Power, Freedom, and Resistance. This course will explore different ways in which Foucault sees power, not as domination and violence, but as necessarily connected to freedom, courage, and a culture of selfcriticism. It will also explore Arendt's conception of freedom as being intrinsic to the human condition and her conception of power as form of concerted action, of solidarity. The main aim of the course will be to bring these two thinkers in dialogue with each other in ways that highlight that power requires freedom, while freedom has no reality in the absence of the actual capacities of the political subjects for free action. 6 credits, $S S$; $\mathrm{HI}, \mathrm{IS}$, Offered in alternate years, Not offered in 2013-2014
263. 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, marketbased economies. 6 credits, SS; SI, IS, QRE, Winter-A. Montero
264. Politics of Contemporary China This course examines the political, social and economic transformation of China over the past thirty years. Students will explore the transformation of the countryside from a primarily agricultural society into the factory of the world. Particular emphasis will be placed on economic development and how this has changed state-society relations at the grassroots. The class will explore these changes among farmers, the working class and the emerging middle class. Students will also explore how the Chinese Communist Party has survived and even thrived while many other Communist regimes have fallen and assess the relationship between economic development and democratization. 6 credits, SI, IS, Offered in alternate years, Winter-K. Freeze
265. Capitalist Crises, Power, and Policy 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, $S S$; $S I$, IS, QRE, Offered in alternate years, Not offered in 2013-2014
266. Urban Political Economy 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, IDS, Fall-R. Keiser
267. Comparative Foreign Policy Why do states act the way they do internationally? Why do some states act like "rogues" while others support the system? How do countries choose their allies or enemies? How do governments define their country's national interest and respond to global changes? Foreign policy is where internal politics and external politics intersect. Understanding any country's foreign policy requires that we pay attention to its position in the international system and its internal politics. In this course we will employ approaches from international relations and comparative politics to explore these questions across a range of countries. 6 credits, SS; SI, IS, Not offered in 2013-2014
268. Global Environmental Politics and Policy Global environmental politics and policy is the most prominent field that challenges traditional state-centric ways of thinking about international problems and solutions. This
course examines local-global dynamics of environmental problems. The course will cover five arenas crucial to understanding the nature and origin of global environmental politics and policymaking mechanisms: (1) international environmental law; (2) world political orders; (3) human-environment interactions through politics and markets; (4) paradigms of sustainable development; and (5) dynamics of human values and rules. Prerequisite: none. 6 credits, SS, WR; SI, WR2, IS, QRE, Fall-T. Myint
269. Issues in Postmodern Political Thought This course will introduce several critiques of modern political thought and practice that considered "the project of modernity" to be either fatally flawed or at least deficient. Important themes in their work are the critique of the enlightenment and mass society, of power, agency as well as liberal concepts of the state and the political. In class discussion we will also address questions of method and language through the work of Nietzsche, Schmitt, Foucault, Habermas, Ricoeur, Bourdieu, Gadamer, among others. 6 credits, HI, IS, Winter-P. Petzschmann
271. 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 2013-2014
272. 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, Winter-K. Smith
274. Political Psychology of Presidential Foreign Policy Decision Making This course examines the intersection of politics, personality and social psychology as applied to the analysis of U.S. foreign policy. It investigates the impact of individuals, group processes, political and social cognition, and political context on foreign policy decision-making. It explores questions such as: How do personalities of political leaders affect decision-making? How do processes of group decision making affect outcomes? How do individual differences in social and political perception shape elite decision-making? Case studies include Bay of Pigs, Cuban Missile Crisis, Vietnam War, Iranian Hostage Crisis, Iran-Contra Affair, Gulf War, and Wars in Iraq and Afghanistan. 6 credits, SI, IS, Fall-J. Sullivan
276. Arendt: Imagination and Politics We will investigate Hannah Arendt's conception of the political power of imagination, and explore the role hyperactive aesthetic imagination plays in the creation and mass dissemination of extreme political ideologies (i.e., tribal nationalism, racism, and Antisemitism). We will also examine how a benign active imagination, which is, nevertheless, essential to political judgment and political thinking in general, is possible at all. Readings will include The Origins of Totalitarianism, Eichmann in Jerusalem, The Jewish Writings, The Human Condition, and several of Arendt's essays on writers, such as G. E. Lessing, Heinrich Heine, Franz Kafka, Isak Dinesen, Bertolt Brecht, and Hermann Broch. 6 credits, SS; HI, Offered in alternate years, Not offered in 2013-2014
281. 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, QRE, Not offered in 2013-2014
285. The U.S. Intelligence Community Intelligence affects every aspect of the development of national security strategy and foreign policy objectives, and many other governmental decisions as well. Students will study the entire spectrum of the U.S. Intelligence Community, including the intelligence cycle; the many collection capabilities; the role of policymakers; intelligence oversight; budgeting; and the ethical and moral dilemmas of things like spying, covert action, counterintelligence, interrogation, and drone operations. 6 credits, SI, IS, Fall-J. Olson
288. Washington D.C.: A Global Conversation Part I Students will participate in a seminar involving meetings with leading Washington figures in areas of global policy making and regular discussions of related readings. 6 credits, SS; SI, IS, Not offered in 2013-2014
289. Washington D.C. Seminar: A Global Conversation Part II Students will engage with leading scholars
and practitioners in the field of political communication to learn how mass media, particularly TV news, influences politics. We will be especially attentive to United States news coverage of international events in new and old media and its importance in international relations, domestic perceptions of global political concerns (e.g. climate change and universal declarations of human rights). Our seminar readings will draw on research in political psychology and democratic theory. 6 credits, SS; SI, IDS, Not offered in 2013-2014
293. Washington D.C. Seminar: Global Conservation Internship 6 credits, ND; NE, Not offered in 20132014
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, SI, IS, QRE, Offered in alternate years, Fall-B. Allen
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, Not offered in 2013-2014
313. Legal Issues in Higher Education This seminar will explore pressing legal and public policy issues facing American colleges and universities. Since the Supreme Court will rule shortly on a major affirmative action case, we shall first examine how college admissions are shaped by legal principles. The course will also address ways in which core academic values (e.g., academic freedom; robust exchanges of ideas; the creation and maintenance of a community based on shared values) fit or conflict with legal rules and political dynamics that operate outside the academy. Likely topics include campus speech; faculty tenure; intellectual property; student records; and student discipline. 2 credits, SI, Fall—S. Poskanzer
322. Neoliberalism and the New Left in Latin America* This seminar will examine the "post-neoliberal" politics of Latin America, beginning with a reconsideration of the market-oriented turn in the region during the 1980s and 1990s. The seminar will then focus on the rise of leftist governments as diverse as Hugo Chávez' Venezuela, Evo Morales' Bolivia, and Lula da Silva's Brazil. Other topics will include the emergence of antineoliberal movements, the wave of indigenous politics, new social movements, environmental politics, and experiments with anti-poverty programs throughout Latin America. 6 credits, SI, WR2, IS, Fall-A. Montero
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, Winter-G. Marfleet
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, Not offered in 2013-2014
333. Global Social Changes and Sustainability* This course is about the relationship between social changes and ecological changes to understand and to be able to advance analytical concepts, research methods, and theories of society-nature interactions. How do livelihoods of individuals and groups change over time and how do the changes affect ecological sustainability? What are the roles of human institutions in ecological sustainability? What are the roles of ecosystem dynamics in institutional sustainability? Students will learn
fundamental theories and concepts that explain linkages between social change and environmental changes and gain methods and skills to measure social changes qualitatively and quantitatively. 6 credits, $\mathrm{SS}, \mathrm{WR}$; SI , WR2, IS, QRE, Not offered in 2013-2014
338. Politics of Inequality and Poverty* The unequal distribution of income and assets is arguably the most important issue in many political systems around the world, and debates over the appropriate role of government in fighting inequality form a primary dimension of political competition. In this course, we will explore the politics surrounding economic inequality around the world. We will discuss how inequality influences political participation in democracies and dictatorships, shapes prospects for democratic transition/consolidation, and affects economic growth and social well-being. We will also examine when and how political institutions can mitigate negative aspects of inequality. 6 credits, SI, IS, Offered in alternate years, Spring-K. Freeze
348. Strangers, Foreigners and Exiles* We live today in a world characterized by an intense and unprecedented migration of individuals and groups. This makes the encounter with strangers a defining feature of contemporary societies, with tremendous economic, cultural, and political consequences. In this course we will explore the role that strangers, in general, play in human life, the challenges that foreigners create for democratic politics, the promises they bring to it, and the role that exiles can perform in improving the cultural capacity of societies to grasp difference. We will read texts by Arendt and Kafka, Derrida, Sophocles, Camus, Levinas, Heidegger, and Said. 6 credits, SS; SI, IS, Not offered in 2013-2014
350. 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, SS; HI, Not offered in 2013-2014
350. Montesquieu Along with Hobbes, Locke, and Spinoza, Montesquieu was one of the great founders of modern liberalism. He was especially influential on American constitutionalism. Yet perhaps more than any of liberalism's others founders, Montesquieu grounded his teaching in a wide-ranging investigation of alternatives (including ancient alternatives) and in an exhaustive investigation of human nature. These features of his thought make him particularly useful to us, who may be seeking new-and perhaps nobler-possibilities for liberalism. In this course we will undertake a close reading of Montesquieu's most comprehensive book, The Spirit of the Laws. 6 credits, SS; HI, Not offered in 2013-2014
351. Political Theory of Martin Luther King, Jr. This seminar will examine the speeches, writings, and life of Dr. Martin Luther King, Jr. Students will study King as an example of the responsible citizen envisioned by the theory expressed in The Federalist, as a contributor to the discourse of civil religion, and as a figure in recent American social history. 6 credits, SS, RAD; SI, IDS, Not offered in 2013-2014
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, IDS, Winter-L. Cooper
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, SS, WR; SI, WR2, IS, Offered in alternate years, Fall-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
359. Cosmopolitanism* Is cosmopolitanism just a form of disguised imperialism or does it represent a genuine
recognition and incorporation of diversity in ways that make the world a moral community? How are we to deal with strangers and foreigners? Do we have duties to strangers? Is hospitality a human right? Is it realistic to think that we can develop trans-national forms of democracy? This course will address these and other questions through a dialogue with thinkers as diverse as: Im. Kant, J. G. Herder, J. Habermas, S. Benhabib, A. Appiah, S. Muthu, J. Derrida, and B. Honig. 6 credits, SS; HI, Offered in alternate years, Not offered in 20132014
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, SS, WR; SI, WR2, IS, QRE, Winter-T. Myint
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
365. Political Economy of Global Tourism* As manufacturing has migrated to places with cheaper labor, many cities have turned to tourism to attract capital, employ low-skilled labor, and develop a niche in the global economy. We will pay particular attention to the consequences, for cities and their inhabitants, of the policy of tourism-driven economic development. We will also consider what it is that is being manufactured, marketed and sold in the tourist economy. Our investigation will proceed in an interdisciplinary manner, with inquiry into the political, sociological, anthropological, and economic consequences of tourism. Prerequisite: There are no prerequisites but participation in a college-level study abroad program will be an asset. 6 credits, SS; SI, IS, Offered in alternate years, Winter-R. Keiser
366. Urban Political Economy* 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, SS; SI, IS, Not offered in 2013-2014
371. Modern Political Philosophy: Modernity and Its Discontents Crosslisted with POSC.251. The philosophers who launched the modern age thought that humanity could achieve security and prosperity if people's concerns were directed away from transcendent longings (which often resulted in fanaticism and conflict) toward lower and more attainable ends. That project has borne impressive fruit. But it has also, almost from the beginning, stirred a restless discontent that has sometimes erupted in the form of utopian ideologies and totalitarian horrors. In this course we will study both those who helped launch the modern project (Hobbes, Spinoza, and/or Locke) and its most powerful critics (Rousseau, Nietzsche). 6 credits, HI, IS, Fall-L. Cooper
383. Identity and Belonging in the New Europe: Politics of the European This course examines the formation, development, institutions, laws, and major policies of the European Union. It will introduce students to some of the key challenges of EU-level governance and pressing policy problems facing the European community. In addition to classroom activities, students will travel to Brussels and other sites to meet with policy makers and observe the dynamics of EU institutions, including the Committee of the Regions, the European Parliament in Strasbourg, and Frontex (the EU's border control agency) in Warsaw. 6 credits, ND; SI, IS, Spring-Non-Carleton Faculty
392. Identity and Belonging in the New Europe: Comparative Field Research Methods Throughout the program, students will work in groups to carry out sustained research on the impact that the European Union has had on a selected policy area, such as immigration, minority protections, national self-determination, or human rights. These groups will design and carry out a project involving a combination of field research techniques in comparative politics, including elite interviews, archival research, and quantitative data analysis. Students will spend the first three weeks of the program conducting preparatory background research,
developing a list of contacts and research questions, practicing interviewing and other data collection skills, and learning how to process and analyze the field data that they collect. 6 credits, ND; NE, Spring-D. Gupta
400. Integrative Exercise 6 credits, S/NC, ND, Fall, Winter, Spring-Staff

## PSYCHOLOGY (PSYC)

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, 218, 220, 263, 267
Cognitive Studies Courses: PSYC 220, CGSC/PSYC 232, PSYC 234, CGSC 236, PSYC 238

Social Behavior, Development, and Personality Courses: 224, 248, 250, 252, 254, 256, 258, 260

Majors are advised to plan their schedules carefully in light of the prerequisites listed for upper-level 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 210-267) including one from the Biological and Behavioral Processes group (210, 212, 216, 218, 220, 263, 267), one from the Cognitive Studies group (220, 232, 234, 238, CGSC 236, 238), and one from the Social Behavior, Development and Personality group (224, 248, 250, 252, 254, 256, 258, 260); two upper-level courses (318384, CGSC 380, CGSC 385, CGSC 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).

All majors should 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 sociologyanthropology 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 first half of the spring of the junior year (299) plus either 397, 398 or

399 during the latter half of that spring term 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

110. 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, SpringStaff
111. 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-M. Van Der Wege
112. 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, WinterM. Van Der Wege
113. 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, Winter-J. Neiworth
114. 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, Winter-J. Neiworth
115. 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. Prerequisite: Psychology 110. 6 credits, MS; LS, Fall—

## S. Meerts

217. Laboratory Research Methods in Behavioral Neuroscience 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. Psychology 217 requires concurrent registration in Psychology 216 or permission of the instructor. A grade of C- or better must be earned in both Psychology 216 and 217 to satisfy the LS requirement. 2 credits, ND; LS, Fall-S. Meerts
218. Hormones and Behavior In this course, students will learn about the relationship between hormones and behavior. The approach in this course will be based in biological psychology and will emphasize the experimental evidence upon which our understanding of hormones and behavior is constructed. Students will learn about the techniques used to ask questions in neurodocrinology. Topics will include the endocrine system, sexual differentiation, the stress response, and reproductive and parenting behaviors. Prerequisite: Psychology
219. Psychology 216 recommended or permission of instructor. 6 credits, SS; SI, WR2, Spring—S. Meerts
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. Co-requisite: Enrollment in Psychology 221. 6 credits, SS; LS, Spring-J. Strand
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, Spring-J. Strand
222. 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, Not offered in 2013-2014
223. 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. Corequisite: Psychology 233. A grade of C- or better must be earned in both Cognitive Science 232 and 233 to satisfy the LS requirement. Prerequisite: Psychology 110 or permission of the instructor. 6 credits, SS, WR; LS, WR2, Winter-K. Galotti
224. Laboratory Research Methods in Cognitive Science 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/Cognitive Science 232 and 233 to satisfy the LS requirement. 2 credits, ND; LS, Winter-K. Galotti
225. 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, Not offered in 2013-2014
226. 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, Not offered in 2013-2014
227. Memory Processes Memory is a key foundational component of most human activities. This course will explore different types of memory (working memory, episodic memory, semantic memory, implicit memory, procedural memory), how we encode and retrieve memories, methods of studying memory, memory changes over the lifespan, and applications of this knowledge to day-to-day life (education, law, medicine, advertising). Prerequisite: Psychology 110. 6 credits, SS; SI, Offered in alternate years, Fall-M. Van Der Wege
228. 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. A major component will be on applied products such as a web site containing 1) critical analysis of a particular cross cultural psychological phenomenon, and 2) 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, WR; SI, WR2, Spring-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, Not offered in 2013-2014
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 2013-2014
254. Psychopathology An introduction to theories, research, treatments, and issues in the field of psychopathology. This course will be run as a seminar. Prerequisite: Psychology 110 or consent of the instructor. Recommended: Psychology 252. 6 credits, SS; SI, Fall-S. Kozberg
256. 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. Prerequisite: Psychology 110. 6 credits, SS; LS, Winter—N. Lutsky
257. 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-N. Lutsky
258. 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. A grade of C- or better must be earned in both Psychology 258 and 259 to satisfy the LS requirement. Prerequisite: Psychology 110 or permission of the instructor. 6 credits, SS; LS, Spring-Z. Rothschild
259. 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. A grade of C- or better must be earned in both Psychology 258 and 259 to satisfy the LS requirement. 2 credits, ND; LS, Spring-Z. Rothschild
260. 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, Fall-K. Abrams
261. 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, Fall-K. Abrams
263. 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, Not offered in 2013-2014
267. Clinical Neuroscience This course will explore brain disorders with significant psychological manifestations, such as Alzheimer's disease, anxiety, depression, schizophrenia, and substance abuse, among others. Students will also receive a foundation in brain anatomy, physiology, and chemistry so that they may better understand the biological correlates of these clinical conditions. Prerequisite: Psychology 110. 6 credits, NE, Winter-L. Wichlinski
299. 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 Psychology 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 Psychology 397, 398 , or 399 depending upon discussions and expressed interest. Prerequisite: Psychology Major. 3 credits, S/CR/NC, ND; NE, Spring-Staff
300. Special Topics in Psychological Research This course is a hands-on empirical research seminar related to a faculty member's research program. Students are expected to collect and analyze data, read primary literature, meet regularly with the faculty supervisor, and submit a final paper. Prerequisite: Psychology 110 and permission of the instructor. 1-6 credits, Fall-Staff
318. 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, Not offered in 2013-2014
354. Counseling Psychology An introduction to theories, research, techniques, and issues in the field of counseling psychology. This course will be run as a seminar. Prerequisite: Psychology 110 or consent of the instructor. Recommended: Psychology 252. 6 credits, SS; SI, Not offered in 2013-2014
358. Cross-Cultural Psychology Seminar in Prague: Psychopathology In the West mental illness has traditionally been approached with a biomedical model that views it as independent of culture. By contrast the "relativist" position assumes that, to a large extent, human behaviors are culturally determined and that the etiology and manifestation of mental disorders are affected by society and culture. This course will address such issues as well as their implications for assessment and treatment through an examination of several Western and non-Western societies, with a special emphasis on Czech society. There will be several guest lectures by Czech psychology professors as well as excursions within Prague to psychiatric hospitals and clinics, where students will meet with Czech clinicians and patients. 6 credits, SS, RAD; SI, IS, Not offered in 2013-2014
362. Psychology of Spoken Words This course explores the cognitive and perceptual processes that allow humans to understand and produce spoken words. We will review major findings on word perception and production, and then focus on specific topics including the perception of accents in speech, language disorders, the links between music and speech, the connection between sounds and meaning, the influence of gesturing on word production, slips of the tongue, bilingualism, tip-of-tongue-states (being temporarily unable to recall a word), and other related issues. Prerequisite: Psychology 110 or Linguistics 110. 6 credits, SS; SI, Not offered in 2013-2014
365. 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. Prerequisite: Psychology 110 or consent of the instructor. 6 credits, SS; SI, Spring-K. Abrams
366. 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, Not offered in 2013-2014
370. Neurobiology of Motivated Behaviors This seminar will provide an in depth look at a specific research area to explore how the brain is involved in the expression of motivated behaviors like reproduction and parenting. Readings will primarily come from empirical research articles. Discussions will be used to reflect on societal views of sexuality, sex differences and brain function. Prerequisite: Psychology 110 and 216.6 credits, SS; NE, Not offered in 2013-2014
371. 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. Prerequisite: Psychology 110 or Biology 126 or Psychology 216 or permission of the instructor. 6 credits, SS; SI, QRE, Not offered in 2013-2014
372. Perceptual \& Cognitive Expertise Some people are able to play (and win!) a dozen games of chess simultaneously or remember thousands of digits of pi. Most people can effortlessly recognize thousands of faces and easily discriminate between similar speech sounds. How do people develop these levels of expertise? This course will explore the processes underlying perceptual and cognitive expertise. Topics include the development of expertise in music perception and performance, memory, sports, visual processing, and taste perception. We will also discuss how attaining expertise in a given domain changes information processing. Prerequisite: Psychology 220 or Psychology/Cognitive Science 232 or permission of the instructor. 6 credits, ND; SI, Offered in alternate years, Winter-J. Strand
373. 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, ND; NE, Not offered in 2013-2014
375. 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, Spring-M. Van Der Wege
376. 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, Fall-L.

## Wichlinski

379. 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
380. Seminar in Developmental Psychology: Media and Youth This seminar will focus on how youth (birth to 18 years) consume media and how it affects their growth in both positive and negative ways. We will read about and discuss such topics as socialization, educational technology, video games, virtual reality, the Internet, prosocial media, advertising, stereotypes, body image, sexualization, and aggression. We will discuss several theories regarding how media influences development and will debate the myths and realities of media. By the end of this seminar, you will be familiar with how media helps and hinders development and with recommendations for its use with youth. Prerequisite: Psychology 110. 6 credits, SS; SI, Not offered in 20132014
381. 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, Not offered in 2013-2014
382. Developmental Psychology Seminar: Infancy This seminar begins with an overview of infant development. We then delve into specific issues related to the experimental techniques utilized in infant research to draw conclusions about how the mind is developing and what infants do and do not understand at a given age. We will also highlight numerous practical and controversial issues in reference to infancy (to name a few - technology use, co-sleeping practices, breastfeeding, vaccinations, early intervention, spanking/smacking, nutrition, etc.). Reading materials will be drawn from both seminal and recent journal articles in the area of infancy. Prerequisite: Psychology 110. 6 credits, SS; SI, Not offered in 2013-2014
383. Psychology of Prejudice This seminar introduces students to major psychological theories and research on the development, perpetuation and reduction of prejudice. A social 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. Prerequisite: Psychology 110 or permission of instructor. Psychology 256 or 258 recommended. 6 credits, SS, RAD; SI, IDS, Winter-S. Akimoto
384. Seminar in Existential Social Psychology This seminar will introduce students to an emerging discipline within the field of social psychology known as experimental existential psychology. The course will focus on various theories and empirical research investigating how concerns about basic issues of the human condition, such as death, meaning, isolation, identity and freedom influence a wide array of human behaviors. Prerequisite: Psychology 252, 256, or 258, or permission of instructor. 6 credits, SI, Fall—Z. Rothschild
385. Biological 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-L. Wichlinski
386. 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-J. Strand, M. Van Der Wege
387. 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-K. Abrams, N. Lutsky
388. Integrative Exercise Prerequisite: Psychology 397, 398, or 399.6 credits, S/CR/NC, ND; NE, Fall, Winter-Staff

## Other Courses Pertinent to Psychology

CGSC 236 Thinking, Reasoning and Decision Making (Not offered in 2013-2014)
CGSC 380 Preschool Cognitive Development (Not offered in 2013-2014)
CGSC 385 Cognitive Development in Middle Childhood (Not offered in 2013-2014)
CGSC 386: Adolescent Cognition
RELIGION (RELG)

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, of which no more than twelve from outside the department (either non department off-campus studies or outside department).

## Required courses:

RELG 110 Understanding Religion, taken by the end of fall of the junior year
RELG 300 Theories and Methods in Religious Studies
RELG 399 Senior Research Seminar
RELG 400 Integrative Exercise 3 credits
12 credits of 300 -level seminars other than 300 and 399
Breadth
Two 100-level survey courses numbered between 120-170
Depth
a. Traditions: twelve or more credits corresponding to one of the following traditions:

Buddhist Traditions
Christian Traditions
Hindu Traditions
Islamic Traditions
Jewish Traditions
Traditions in the Americas
b. Themes: eighteen or more credits corresponding to one of the following themes:

Religious Thought and Philosophy
Ethics, Law, and Politics
Lived Religion and Culture
Religion and Social Power: Gender, Race, Ethnicity, Colonialism

## Religion Courses

100. Imagining Home: Religions in Diaspora What and where is "home" for people on the move? Is "home" a place, a tradition, a family, a nation, a people, a prayer, or a dream? Who feels "at home" and why? How does the stranger define who belongs? What are the effects of diaspora on religion, politics, fundamentalism, gender, sexuality, and community? This class will consider the experiences of diasporic communities--Jews, Africans, and Asians--in history and modernity. Through works of literature, theology, film, and cultural studies we will explore how communities have preserved, negotiated, and transformed their identities, traditions, and nationalities in global migrations and contexts. 6 credits, WR; AI, WR1, IS, Fall-S. Sippy
101. Understanding 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, WR; HI, WR2, Fall, Winter, Spring-K. Bloomer, L. Osborne, S. Sippy
102. 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, RAD; HI, Not offered in 2013-2014
103. 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, Winter-S. Sippy
104. 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, HU; HI, Offered in alternate years, Not offered in 2013-2014
105. Introduction to Islam This course provides an introduction to the tradition of Islam, beginning with an overview to the foundational sources of the tradition--the Qur'an and the sayings and life of the Prophet Muhammad. Tracing the development of Islam from its origins, students will learn of the diverse ways in which Muslims have lived and defined themselves and the tradition up to the present moment. We will encounter a lived tradition, one that is constantly defined, redefined, and contested through the beliefs and practices of Muslims in interpretation of scripture, ritual life, literature, art, and other modes of expression. 6 credits, HI , WR2, IS, Fall-L. Osborne
106. The Qur'an What is the Qur'an? Different people give different answers to this question. Muslims can regard the Qur'an as the literal revealed word of God. At the same time, non-Muslims can find such a view difficult to grasp. This course introduces students to major themes of scholarly discussion on the textual, interpretive, and experiential dimensions of the Qur'an. We will also discuss traditional Muslim accounts and challenges posed by contemporary critical scholarship. 6 credits, HI, IS, Not offered in 2013-2014
107. 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, Not offered in 2013-2014
108. 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, Not offered in 2013-2014
109. 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, $H U, W R, R A D ; H I$, WR2, IDS, Fall-M. Mueller
110. 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, WR2, Winter-K. Bloomer
111. 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, Not offered in 2013-2014
112. 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, Spring-A. Sango
113. Introduction to Buddhism This course offers a survey of Buddhism from its inception in India some 2500 years ago to the present. We first address fundamental Buddhist ideas and practices, then their elaboration in the Mahayana and tantric movements, which emerged in the first millennium CE in India. We also consider the diffusion of Buddhism throughout Asia and to the West. Attention will be given to both continuity and diversity within Buddhism--to its commonalities and transformations in specific historical and cultural settings. We also will address philosophical, social, political, and ethical problems that are debated among Buddhists and scholars of Buddhism today. 6 credits, HU, RAD; HI, IS, Fall-A. Sango
114. Religions of Southeast Asia This course explores the extraordinary color and diversity of religion as it is practiced and understood in Southeast Asia, with special reference to indigenous, Hindu, Buddhist, Islamic, and Christian traditions. Beginning with an overview of the historical development and contemporary practice of Southeast Asian religions, the course examines how religious traditions have influenced, and been influenced by, the varied social, political, and cultural contexts and local traditions of Southeast Asia. 6 credits, HI, IS, Not offered in 2013-2014
115. Hebrew Bible The Hebrew Bible (aka Old Testament) represents a millennium of beliefs, desires, and customs from ancient Israel and Judah, many of which still reverberate today. Who were its authors? Why did they write what they did? How does their writing compare with literatures from the superpowers of their day: the Canaanites, the Hittites, the Egyptians, and the Mesopotamians? Integrating a cross-disciplinary spectrum of religion, history, and literature, students in this class will interpret Hebrew Bible texts in English using methods employed by biblical scholars, asking questions about language and meaning, literary effects, and Hebrew Bible's social and historical contexts. 6 credits, HU; HI, Offered in alternate years, Spring-K. Brink
116. 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 women's spiritual authority; noncanonical 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, Spring-L. Pearson
117. Qur'an This course offers an exploration of the Qur'an, the scripture of Islam. In introducing the text, we will examine the historical and literary context in which it was revealed to the Prophet Muhammad in seventh century Arabia. Through close reading we will survey the many messages, themes, and literary and poetic styles found in the text itself. Special attention will also be given to the range of methods and approaches that Muslims have used in interpreting the Qur'an, and the role played by the text in ritual life. 6 credits, $H U, W R$, RAD; HI, WR2, IS, Fall-L. Osborne
118. 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, Not offered in 2013-2014
119. Sex and Scriptures This course will juxtapose contemporary sexual theories with 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. 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, WR; HI, WR2, IDS, Not offered in 2013-2014
120. Sex, Jews and Gender Questions raised by feminism and gender studies have transformed religious traditions and dramatically changed the way scholars approach the study of religion. In this course, we will consider how reading Jewish tradition with attention to gender opens up new ways of understanding Jewish history, texts, theology and ritual. We will also consider how women and feminism have continually and newly envisioned Jewish life. We will interrogate how Jewish masculinity and femininity have been constituted through, reinforced by, and reclaimed/transformed in Jewish texts, law, prayer, theology, ethics and ritual, in communal as well as domestic contexts. 6 credits, HU, WR, RAD; HI, WR2, IDS, Not offered in 2013-2014
121. 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 "post-Zionist" 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, HU ; HI, Not offered in 2013-2014
122. 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 2013-2014
123. Liberation and the Bible Liberation theologians argue that the core theme of the Judeo-Christian Bible is human liberation. This course will survey the classic biblical texts used to support this claim, as well as the key concepts and theoretical presuppositions of liberation hermeneutics. We will also engage with contemporary challenges to classic liberation approaches coming from post-colonial, queer, indigenous, feminist, critical race and disability studies. Liberation readings from all continents will be covered utilizing the new Peoples' Bible and The Peoples' Companion to the Bible. 6 credits, HU, WR, RAD; NE, WR2, IS, Not offered in 2013-2014
124. Liberation Theologies An introduction to liberationist thought, including black theology, Latin American liberation theology, and feminist theology through writings of various contemporary thinkers. Attention will be directed to theories of justice, power, and freedom. We will also examine the social settings out of which these thinkers have emerged, their critiques of "traditional" theologies, and the new vision of Christian life they have developed in recent decades. Previous study of Christianity is recommended but not required. 6 credits, HI , WR2, IDS, Spring-L. Pearson
125. Images of God: Art and the Christian Tradition This course explores Christianity's complex and shifting relationship to image-making, beauty and the arts across the centuries. We read Christian theologies and philosophies of art, analyze Christian works of art and visit churches to consider the role of art in worship. Topics include: the beauty of God and the ugliness of Christ, incarnation and the theology of matter, image vs. idol, iconoclasm, beauty as a path to God, Christianity and censorship, art as co-creation with God, the artist as prophet. 6 credits, HU, WR; HI, WR2, Not offered in 2013-2014
126. 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, HU, RAD; HI, IDS, Not offered in 2013-2014
127. From Luther to Kierkegaard Martin Luther and the Reformation have often been understood as crucial factors in the rise of "modernity." Yet, the Reformation was also a medieval event, and Luther was certainly a product of the late Middle Ages. This class focuses on the theology of the Protestant Reformation, and traces its legacy in the modern world. We read Luther, Calvin, and Anabaptists, exploring debates over politics, church authority, scripture, faith, and salvation. We then trace the appropriation of these ideas by modern thinkers, who draw upon the perceived individualism of the Reformers in their interpretations of religious experience, despair, freedom, and secularization. 6 credits, HU, WR; HI, WR2, Offered in alternate years, Not offered in 2013-2014
128. God and Desire This course explores the messy entanglements of desire for God and desire for earthly things, erotic relationships with the divine and those among human beings. We begin with Plato's conception of Eros, and then trace its disavowal and/or appropriation in the history of Christian thought and its reemergence in modern and postmodern Western thought, especially that informed by psychoanalysis. We explore the ways that the Christian ascetic and mystical traditions and psychoanalysis are allied discourses inasmuch as they are means of discerning and relating to the desires of the heart. 6 credits, HU, WR; HI, WR2, Not offered in 20132014
129. Be a Man: Masculinity and Christianity From action figures to images of Jesus, masculinities are everpresent if seldom acknowledged. This course explores the changing conceptions of masculinity in Christianity and the West in relation to issues of gender and sexuality, and in debates around God, morality, and family. We consider recurring tropes in Christian and Western conceptions of masculinity, but pay particular attention to images of suffering male bodies--from the crucified Christ to Robert Mappelthorpe's photographs. How do such images reinforce notions of male "toughness" and how do they reveal the vulnerability of male bodies and the agency-perhaps the redemptive power-of such vulnerability? 6 credits, $H U, W R ; H I, W R 2$, IDS, Not offered in 2013-2014
130. The Sacred Body The human body has been a focus of reflection throughout history and across traditions. Drawing on specific examples from various historical, geographical, and cultural contexts, we will explore numerous ways of constructing, deconstructing, cultivating, imagining, representing, disciplining, habituating, inhabiting, and adorning the body--both in daily life and in religious fields. We will explore different forms of bodily knowledge and their relation to subjectivity. We will also take up questions about the relation between the soul (insofar as it is relevant in certain traditions), the self, and the body as it has been elaborated in a variety of contexts. 6 credits, HU, WR; HI, WR2, IS, Offered in alternate years, Not offered in 2013-2014
131. American Holy Lands From the fifteenth-century "discovery" of the New World to twenty-first-century construction of a "Holy Land" theme park in Orlando, this course explores how diverse religious, racial, and political communities have understood America as a "holy land." In particular, we examine how certain religious communities (e.g. Puritans, Mormons, Native Americans, Jewish immigrants) have re-centered sacred history-even the future--on the American continent. Examining "America" at a macro-level as well as exploring specific, local "sacred spaces," this course studies reoccurring themes of revelation, exodus, conquest, and pilgrimage, which frame America as "the promised land," but sometimes modern-day "Babylon." 6 credits, HI, WR2, IDS, Fall-M. Mueller
132. 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, Not offered in 2013-2014
133. 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, Not offered in 2013-2014
134. RAP and Religion: Rhymes about God and the Good We will explore the origins, existential, and ethical dimensions of Rhythm and Poetry (RAP) music. Giving attention to RAP songs written and produced by African American artists, including Tupac, Nas, Cee-lo Green, Dante Smith, Michael Franti, The Roots, and Lauryn Hill,
we will analyze their work with an interest in understanding the conceptions of God and the good reflected in them, and how these conceptions connect to and reflect African American cultural practices. Weekly, we will read one theoretical, biographical, or sociological book and listen to one album. Assignments will include book review essays, music reviews, and a final paper. 6 credits, HU, WR, RAD; HI, WR2, IDS, Not offered in 20132014
135. 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 shariá 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, RAD; HI, Offered in alternate years, Not offered in 2013-2014
136. 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 20132014
137. 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, WR, RAD; HI, WR2, IS, Spring-A. Sango
138. 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, HU , WR, RAD; HI, WR2, IS, Not offered in 2013-2014
139. Mahabharata: The Hindu Book of War and Peace The Mahabharata, perhaps the longest epic poem ever composed, tells the story of a fratricidal war at the dawn of Indian history. It is an inexhaustible source of Hindu mythology, religion, philosophy, psychology, ethics, political theory, and social thought. We will study both the broad outlines and particular sections of the Mahabharata, including its most famous episode, the Bhagavad Gita. We will explore the epic both in its traditional context and through modern artistic re-creations. Throughout, we will seek to understand what the Mahabharata tells us about the enduring values, and notions of war and peace, found in Indic civilization. 6 credits, HU, WR, RAD; HI, WR2, IS, Offered in alternate years, Not offered in 2013-2014
140. 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, HU, WR, RAD; HI, WR2, IS, Not offered in 2013-2014
141. 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, $H U, W R, R A D ; H I, W R 2, I S$, Not offered in 2013-2014
142. 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, WR2, Winter-A. Sango
143. 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 2013-2014
144. Sharia Shari'a, or Islamic law, has played a vital role in the conduct of Muslims throughout time. What does it mean for modern Muslims in various political and cultural contexts to live their lives according to shariá? What does it mean that shariá is said to be divine law? To what extent\ can it adapt to modern realities? This course critically examines the relationship between Islamic law and Muslim life. Building a solid foundation in the substantive teachings of shariá which include ritual law, family law, criminal law, and constitutional law, the course explores major issues of Islamic legal discourse in modern times. 6 credits, HI, IS, Not offered in 20132014
145. Gandhi Mohandas Gandhi was among the most controversial and influential figures of the twentieth century. Whether as anti-colonial revolutionary, philosopher of non-violent resistance, proponent of social and religious tolerance, or reformer of Hindu traditions, he left a mark not only on India, but on the world at large. This course will seek to understand the complex relation among Gandhi's religious, social, and political stances. We will explore the religious and cultural sources of his ideas, the way they played out in real historical events, and the influence they have had, in India and elsewhere, in the six decades since his death. 6 credits, $H U, W R$, RAD; HI, WR2, IS, Not offered in 2013-2014
146. Tantra: Secrecy, Sex, and the Sublime This course focuses on the esoteric South Asian approach to religion commonly known as "Tantra." Inspired by revealed texts called tantras, medieval Hindus, Buddhists, and Jains developed a rich, complex approach to spiritual life that focused not on ascetic transcendence of the world but on utilizing and sublimating bodily and mental processes, including sex, violence, death, and the imagination. We will explore the ideology, rhetoric, praxis, and social consequences of Tantra in its original Indic setting, and its echoes in Tibet, elsewhere in Asia, and the modern West--where it has been a source of fascination, revulsion, and much misunderstanding. 6 credits, HI, WR2, IS, Offered in alternate years, Winter-

## R. Jackson

261. Hearing Islam This course explores the ways in which religion, Islam in particular, has been conceived and represented through sound. How does hearing or saying affect the practice of religion? What makes a particular sound religious, with regard to either its production or its experience? Topics will include the call to prayer, recitation of the Qur'an, genres of Islamic music from a wide range of historical and cultural contexts (such as ghazals--love poems set as songs --and Islamic rap, for example), sermons, and other audio artifacts. The course will draw on both reading and listening assignments. 6 credits, HI, WR2, IS, Winter-L. Osborne
262. Islamic Africa The goal of this course is to re-center Africa within Islamic studies and to re-center Islam and Arabic culture within African Studies. A Middle-East-centrism characterizes the academic study of Islam and misses the importance of Africa and other so-called "frontiers" in shaping the development of global Islamic thought and culture. On the other hand, African Studies has yet to fully integrate Islamic and Arab societies on the continent due to historical discord. This course explores the Sahara, the Red Sea, and the Indian Ocean as places of exchange, not barriers, examining several distinct Islamic cultures in Africa's past and present. 6 credits, HU, WR, RAD; HI, WR2, IS, Offered in alternate years, Not offered in 2013-2014
263. Islamic Mysticism This course offers an overview of the mystical thought, concepts, and practices within Islam known as Sufism. In examining the development of this distinctive mystical tradition, we will come to understand its inextricable relationship to Islam, and to appreciate Sufi contributions to that broader tradition.

Our study of Sufism will also grapple with definitional issues concerning mysticism more broadly in religious studies. We will pay particular attention to the historical development of Sufism from early ascetics through medieval thinkers to popular orders and practices in the modern world. 6 credits, HI, WR2, IS, Not offered in 2013-2014
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, HI, WR2, IS, Offered in alternate years, Not offered in 2013-2014
265. Religion and Violence: Hindus, Muslims, Jews Whether seen on T.V. screens or in history books, the horror of war, genocide, terrorism, communal violence, and land disputes often prompts the question: is religion the problem? Conversely, one may point to the peaceful aspirations and non-violent social movements that have been led by religious leaders, and motivated by religious philosophies and impulses and ask: can religion be the solution? This course will explore the complex, and sometimes paradoxical roles religious ideas, practices, communities, and leaders play in both the perpetuation and cessation of violence. Case studies will be drawn from Hindu, Muslim, and Jewish conflicts in recent history. 6 credits, $H U, W R, R A D ; H I, W R 2, I S$, Offered in alternate years, Winter-S. Sippy
266. Religion and the Senses Looking across a range of religious traditions, this course examines the modes of the human senses in relation to religious experience, drawing on both primary and secondary literature. We will ask such questions as: are the senses acting as a means allowing for perception of the divine, or some kind of experience or contact? Are they a medium for self-discipline, in either a positive sense through the cultivation of a pious self, or negatively, through denial? Are the senses serving as a metaphor, and, if so, to what end? We will also interrogate the boundaries and relationships between senses. 6 credits, WR; HI, WR2, IS, Spring-L.

## Osborne

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 2013-2014
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 2013-2014
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, Not offered in 2013-2014
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, HU, WR; HI, WR2, Not offered in 2013-2014
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, $\mathrm{HU} ; \mathrm{HI}$, Not offered in 2013-2014
272. Law, Religion, and Morality Normative and descriptive accounts of the law, particularly in relation to politics, morality, and religion, will be the focus of this course. Philosophical literature, legal theory, ethnographies, political constitutions, human rights charters, court decisions, religious scripture, novels, and film will be studied in order to help us grasp how different traditions, from the Greek tragedians to American lawyers and artists, have distinguished the categories legal, political, moral, and religious from one another; understand how legal institutions and conceptions of the law shape our social reality; and articulate our own theories about how the phenomena in question relate, actually and normatively. 6 credits, $H U$, WR; SI, WR2, IDS, Offered in alternate years, Not offered in 2013-2014
273. Nonviolent Social Change: Theory and Praxis Nonviolent direct action has effectuated major sociopolitical change in an impressive array of societies during the past century. India and the United States are prominent examples. In this class we will give attention to the historical conditions and events that led to the emergence of the theory of nonviolence (from Gandhi to Chavez) and the nonviolent activist tradition, and analyze the social movements that have informed the development of and been animated by theories of nonviolent social change. Examining the interrelationship and cross influences among members of the transnational tradition will be a key focus of our class discussions. 6 credits, HU ; SI, IS, Offered in alternate years, Not offered in 2013-2014
274. Anarchism: Religion, Ethics, Political Obligation Anarchism emerged in the nineteenth century as an important transnational sociopolitical philosophy. Course participants will analyze anarchism as a political philosophy and as a social movement, from the nineteenth century labor movement to the ongoing global justice movement, with the objective of understanding the strengths and weaknesses of the normative visions (i.e. a society without violently enforced political decisions) presented by anarchist theorists and groups and the means that anarchists (from Thoreau and Proudhon, Bakunin and Tolstoy, Kropotkin and Emma Goldman, Dorothy Day and Murray Bookchin, and others) have prescribed and employed in order to realize their respective social visions. 6 credits, HU, WR; SI, WR2, IS, Not offered in 2013-2014
275. 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-in-residence to consider the role performance plays in constructions of rituals, religions and cultures. 6 credits, HU; HI, IDS, Not offered in 2013-2014
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, WR, RAD; HI, WR2, IS, Spring-K. Bloomer
277. Global Religions in Minnesota Somali Muslims in Rice County? Hindus in Maple Grove? Hmong shamans in St. Paul hospitals? Sun Dances in Pipestone? In light of globalization, the religious landscape of Minnesota, like America more broadly, has become more visibly diverse. Lake Wobegon stereotypes aside, Minnesota has always been characterized by some diversity but the realities of immigration, dispossession, dislocation, economics, and technology have made religious diversity more pressing in its implications for every arena of civic and cultural life. This course bridges theoretical knowledge with engaged field research focused on how Midwestern contexts shape global religious communities and how these communities challenge and transform Minnesota. 6 credits, HU, RAD; HI, WR2, IDS, Spring-S. Sippy
278. Theories and Methods 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-A. Sango
279. Ritual, Transformation, Tradition Ritual connotes patterns and adherence to traditional pasts, and yet the workings of ritual often imply intentions to effect change, invoking the power of ritual transformation. In this, the study of ritual invokes central tensions animating the study of religion: continuity and change, social stability and
transformation. This course explores "ritual" and "tradition" from a range of scholarly perspectives: theoretical; anthropological; textual; sociological; political; and psychological. Working at the level of the individual and communal, or the cosmic and political, we will consider the processes of ritual preservation and innovation. 6 credits, HU, WR; HI, WR2, IDS, Not offered in 2013-2014
280. 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 2013-2014
281. Radical Pacifism This advanced 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, Not offered in 2013-2014
282. Contemporary Islamic Renewal This course will explore the intellectual origins and contemporary manifestations of movements of Islamic renewal. First, by reading the classical texts which undergird the theology and social action of revivalist trends while simultaneously examining how such texts attain new meaning in the present moment, we will problematize the oft-stated dichotomy between tradition and modernity. Next, through exploring ethnographic and sociological accounts of contemporary Islamic piety movements (of Sufi and Salafi varieties, and the unaffiliated) we will explore the relevance of religion to current debates about ethics, politics, gender, and the arts in the Islamic world and beyond. 6 credits, HU, WR, RAD; HI, WR2, IS, Not offered in 2013-2014
283. 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 á vis Western philosophies. 6 credits, HU, WR, RAD; HI, WR2, IS, Not offered in 2013-2014
284. Spirit Possession This course considers spirit possession in relation to religion, gender, and agency. 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, HU, WR, RAD; HI, WR2, IS, Winter-K. Bloomer
285. Mysticism Drawing from selected traditional texts and modern analyses, we will investigate the human encounter with ultimate reality. Questions we will consider include: What is the definition and typology of mysticism? Is mystical experience truly ineffable? What are its modes of expression? Do all mystics experience the same reality? Is unmediated experience possible? Do mystical experiences show us the truth? Is there a place for reason on a mystical path? What is the role of the body and brain in mystical practice? Does mystical experience make us good? Does it free us? Are mystics critics of institutional religion or social injustice? 6 credits, HU; HI, Spring-R. Jackson
286. The Poetics of Enlightenment Study of selected Asian and Western poetical texts that are purported to express the experience of spiritual illumination. The major focus will be on understanding a range of poems both in their cultural settings and as exemplars of human spirituality. We also will consider Asian and Western theories of "religious poetics;" cross-cultural views of the relation among poetry, holiness and madness; philosophical discussions of the connection between silence and speech; and studies of the nature of metaphor. 6 credits, HU, RAD; HI, Not offered in 2013-2014
287. 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, Fall-L. Pearson
288. 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-L. Pearson
289. Integrative Exercise 3 credits, $S / N C, N D$, Spring-Staff

## Other Courses Pertinent to Religion

ARTH 164 Buddhist Art (Not offered in 2013-2014)
HIST 131 Saints, Sinners, and Philosophers in Late Antiquity (Not offered in 2013-2014)
HIST 202 Iconoclasm in the Early Middle Ages (Not offered in 2013-2014)
HIST 203 Papacy, Church and Empire in the Age of Reform (Not offered in 2013-2014)
HIST 230 Institutional Structure and Culture in the Middle Ages (Not offered in 20132014)

HIST 266 History of Islam in India (Not offered in 2013-2014)
HIST 278 The Spanish Inquisition (Not offered in 2013-2014)
HIST 360 Muslims and Modernity (Not offered in 2013-2014)
MELA 230 Jewish Collective Memory
SOAN 260 Myth, Ritual, and Symbolism
WGST 210 Sexuality and Religious Controversies in the United States and Beyond
WGST 310 Asian Mystiques Demystified (Not offered in 2013-2014)

## RUSSIAN (RUSS)

<a href="https://apps.carleton.edu/curricular/russ/facultystaff/">Browse faculty and Staff</a>

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 pre-college 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, 268, Cinema and Media Studies 237); 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, and History 240-242.

Language House: Students have the opportunity to immerse themselves in the language by living in Parish 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
107. 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, Spring-D. Nemec Ignashev
108. 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, Spring-D. Nemec Ignashev
109. 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, Spring-D. Nemec Ignashev
150. Facts and Fairy Tales: Introduction to Russian Cultural History This course explores issues central to life in russia today--e.g., ethnic and religious diversity, gender equality, ecology, poverty (and wealth), demographics, and corruption--through the lens of Russia's arts as developed over the last thousand years.

Media include architecture, folklore, nineteenth- and twentieth-century fiction, painting, music, and cinema. Theoretical texts address different approaches to the study of national cultures. Discussions are supplemented by occasional lectures; student assessment is based on participation, a final exam, ans short papers desinged for inclusion in the portfolio. No knowledge of Russian language or Russian studies assumed or required. 6 credits, AL; HI, WR2, IS, Fall-D. Nemec Ignashev
204. 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, D. Nemec Ignashev
205. 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
207. 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, Spring-D. Nemec Ignashev
208. 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, Spring-D. Nemec Ignashev
209. 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, Spring-D. Nemec Ignashev
226. Moscow Program: Russia's Hallowed Places This course explores localities in Russia that have acquired the significance of hallowed or sacred places, the reasons underlying their designation, and the diversity of belief systems they embody. Localities considered include places in and around Moscow (some holy, others cursed), the routes of literary heroes (and their creators) in St. Petersburg, sites of legendary historical significance in Central Russia, and the "sacred sea" of Siberia, Lake Baikal, and its Buryat-Mongol shamanist-Buddhist environs. Course materials: readings, films, excursions, lectures, and travel. Student learning is assessed through occasional quizzes, weekly discussions, and integrative blog writing assignments. Prerequisite: Acceptance into the Moscow \& Beyond off-campus studies program. 6 credits, $A L, R A D ; ~ H I, ~ I S$, Offered in alternate years, Spring-D. Nemec Ignashev
244. 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, AL, WR; LA, WR2, IS, Not offered in 2013-2014
261. Lolita Rejected by every major publisher to which the author submitted it, first published in France in 1955 by a press known for pornographic trash, Vladimir Nabokov's scandalous novel of a middle-aged college professor obsessed with a twelve-year-old girl continues to feed controversy as well as to challenge and delight readers with its labyrinthian narrative, endless wordplay, innumerable meta-artistic allusions, and troublesome eroticism. Thus warned, you are invited to join the jury in deliberating the designs and delights of this twentiethcentury literary classic. Conducted in English. 3 credits, AL, WR; LA, WR2, Not offered in 2013-2014
266. 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, Not offered in 2013-2014
267. 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, $A L$; LA, IS, Not offered in 2013-2014
268. 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, AL, WR; LA, WR2, IS, Not offered in 2013-2014

## 290. Moscow Program: Independent Reading 3 credits, Spring-D. Nemec Ignashev

301. Russian Skill Maintenance Continued language practice and skill development. Topic in 2011-2012: morphology and vocabulary-building. Meets once weekly. May be repeated according to need; six credits may be counted towards the Russian major. Prerequisite: Russian 204. 3 credits, ND; NE, Not offered in 2013-2014
302. 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, Spring-D. Nemec Ignashev
303. 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; NE, Spring-D. Nemec Ignashev
304. 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, Spring-D. Nemec Ignashev
305. 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 faculty permission. 6 credits, AL; LA, IS, Not offered in 2013-2014
306. Russian Literature for Children Many well-known Russian writers also wrote literature for children. Some sought new ways of educating; others sought refuge from the constraints of censorship. Some incorporated themes from folklore; others created new characters who became part of the literary culture shared by all Russians. This course will examine the evolution of Russian writing for children from the mid-nineteenth century to the present. Works by Tolstoy, Chukovskii, Zoshchenko, Olesha, Kharms, Marshak and others. Conducted in Russian. Prerequisite: Russian 205 or faculty permission. 6 credits, AL; LA, IS, Not offered in 2013-2014
307. 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 2013-2014
308. The Russian Short Story A survey of representative short stories from the past two hundred years. Works by Gogol, Leskov, Chekhov, Babel, Nabokov, Petrushevskaya, Ulitskaya and others. Conducted in Russian. Prerequisite: Russian 205 or the equivalent. 3 credits, LA, IS, Fall-L. Goering
309. 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-Â-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, Winter-A. Dotlibova
310. 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, AL; LA, IS, Not offered in 20132014
311. Senior Seminar: The Cult of Stalin Drawing on materials from film, literature, architecture, and mass culture, we will examine the cult of losif 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; LA, Not offered in
312. Integrative Exercise 6 credits, S/NC, ND, Fall, Winter, Spring—L. Goering, D. Nemec Ignashev

## SOCIOLOGY AND ANTHROPOLOGY (SOAN)

Joining two disciplines as it does, the Sociology and Anthropology Department at Carleton seeks to present a truly unified vision of the 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.

The department strongly recommends that Sociology/Anthropology 110 or 111 be taken prior to enrolling in courses numbered 200 or above.

## Requirements for a Major

Seventy-two credits including: Sociology/Anthropology 110 or 111, 240, 330, 331, 396, 400, and Sociology/Anthropology 239 or Mathematics 115 or 215 or a score of 4 or 5 on the AP Math Statistics exam. Students must fulfill the statistics requirement before taking Sociology/Anthropology 240 . 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.

Students should plan on taking the theory courses, 330 and 331, and the research methods course, 240 no later than their junior year. Sociology/Anthropology 396 is taken in the fall of the senior 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. Cross-Cultural Studies 210, Archeology 246, 395, Women's and Gender Studies 200, 240, and 250 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 off-campus programs. Early in their junior year, students should discuss ways of integrating such an in-depth study into their work in the major with their advisers.

## Sociology/Anthropology Courses

100. 9-5 and then Bye Bye: Working Across our Lives We spend a substantial portion of our lives at work, and the jobs we hold shape our daily activities, personal identity, and social interactions. This course explores the meaning and experiences of work at four key life stages: adolescence, young adulthood, mid-life, and the elder years. At each stage we examine questions such as: is paid employment in the teenage years a good idea? If so, how does it affect schoolwork and well-being? Do the occupational aspirations of today's college students match the jobs available? How do people in mid-career balance work and family? What makes for a good retirement? 6 credits, WR; Al, WR1, QRE, Fall-A. Nierobisz
101. Sex in the Colonial Era Why were sexual liaisons managed during the colonial era? How did people's sexuality become increasingly tied to their identity? What is the relationship between race, class, gender, and sexuality? We will examine how scholars have answered these and other related questions. As a first year seminar this course is designed to help students develop a critical understanding of how the management of sexuality shaped social life during the colonial era. Students will learn how anthropologists study sexuality and how they come up with conceptual and theoretical frameworks based on their data. 6 credits, WR; AI, WR1, IDS, Fall-L. Beck
102. 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, $S S$, RAD; SI, IS, Fall, Winter, Spring-L. Beck, C. Ocampo-Raeder
103. 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, Winter, Spring-A. Nierobisz, E. Raleigh, N. Sohrabi
104. Modern Families: An Introduction to the Sociology of the Family What makes a family? How has the conception of kinship and the 'normal' family changed over the generations? In this introductory class, we examine these questions, drawing on a variety of course materials ranging from classic works in sociology to contemporary blogs on family life. The class focuses on diversity in family life, paying particular attention to the intersection between the family, race and ethnicity, and social class. We'll examine these issues at the micro and macro level, incorporating texts that focus on individuals' stories as well as demographics of the family. 6 credits, SI, QRE, Spring-L. Raleigh
105. Inequality in American Society This course examines the emergence and persistence of inequality in the contemporary United States. We will examine how institutions, ideas and interactions each contribute to the making of inequalities in education, employment, and other major social institutions of society. In doing so, we will pay particular attention to how class, race, gender and other social constructs matter to the making of inequality. We will consider how various theoretical traditions in sociology explain inequality. Finally, we will look at strategies for resistance and challenging inequalities. 6 credits, SS, RAD; SI, IDS, Spring-D. Williams
106. 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, Offered in alternate years, Not offered in 2013-2014
107. Society and Social Problems All societies have what are considered to be "social problems," but a sociological lens offers a unique approach to understanding and examining them. In this course, we consider social problems through three dimensions: who is affected by a social problem; how a social phenomenon becomes a "social problem;" and what kind of a problem it becomes. We consider particular contemporary social problems including the changing nature of work and the economy, contemporary changes in families and relationships, and gender and sexuality. We will also engage in debate about social problems and their solutions from different sociological perspectives. 6 credits, SS; SI, Not offered in 2013-2014
108. 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, Spring-M. Sehgal
109. 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, Not offered in 2013-2014
110. 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 nationstate 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, SS, WR, RAD; SI, WR2, IS, Not offered in 2013-2014
111. 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. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS; SI, QRE, Not offered in 2013-2014
112. Anthropology of Good Intentions Is the environmental movement making progress? Do responsible products actually help local populations? Is international AID alleviating poverty and fostering development? Today there are thousands of programs with sustainable development goals yet their effectiveness is often contested at the local level. This course explores the impacts of sustainable development, conservation, and AID programs to look beyond the good intentions of those that implement them. In doing so we hope to uncover common pitfalls behind good intentions and the need for sound social analysis that recognizes, examines, and evaluates the role of cultural complexity found in populations targeted by these programs. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SI, IS, Offered in alternate years, Fall-C. Ocampo-Raeder
113. 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. 6 credits, SS, WR; FSR, WR2, IS, QRE, Not offered in 20132014
114. 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: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS, WR; SI, WR2, Not offered in 2013-2014
115. Nations and Nationalism Emergence of national states has been one of the most consequential developments in the modern world in the last two centuries. How did national identities gain such an importance? How do nationalisms differ and on what basis do nations reconstruct their pasts differently? The course begins by considering influential theories of nationalism (and state formation). Extensive case studies from Western and Eastern Europe, Africa, India, and the Middle East advance our theoretical understanding, and examine our theories in context. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SI, IS, Fall-N. Sohrabi
116. 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: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS; SI, IDS, Offered in alternate years, Not offered in 2013-2014
117. 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. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS; SI, Not offered in 2013-2014
118. 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. 6 credits, SS; SI, IS, Offered in alternate years, Not offered in 2013-2014
119. 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: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS, WR, RAD; SI, WR2, IS, Winter-L. Beck
120. Masculinity, Gender and Difference The study of gender is often assumed to be the study of women, yet sociologists analyze gender as a social construct that equally includes the study of masculinity and men. In this course, we will examine how masculinities are constructed, as well as how masculinity as a construct operates in institutions, interactions and identities. We will specifically consider how masculinity informs education, the workplace, the family, and popular culture. In all of these areas, we will examine how masculinity intersects with and is modified by categories of difference such as race, nationality, class, and sexuality. 6 credits, SS; SI, IDS, Not offered in 2013-2014
121. 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: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS, WR; SI, WR2, IS, QRE, Not offered in 2013-2014
122. 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 2013-2014
123. 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. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS, WR, RAD; SI, WR2, IS, Offered in alternate years, Spring-L.

## Beck

233. Anthropology of Food Food is the way to a person's heart but perhaps even more interesting, the window into a society's soul. Simply speaking understating a society's foodways is the best way to comprehend the complexity between people, culture and nature. This course explores how anthropologists use food to understand different aspects of human behavior, from food procurement and consumption practices to the politics of nutrition and diets. In doing so we hope to elucidate how food is more than mere sustenance and that often the act of eating is a manifestation of power, resistance, identity, and community. 6 credits, $S I$, IS,

## Spring-C. Ocampo-Raeder

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. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS; SI, IS, Not offered in 2013-2014
235. 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, Not offered in 2013-2014
236. Historical Sociology Historical sociology and historical anthropology provide compelling analyses of large-scale social and cultural change. Are historical social sciences simply about the application of sociocultural methods to a place in the past, or are questions of change over "time" also central to the analysis? If the latter, then what makes historical sociology distinct from historiography? Do historians and social scientists have anything to learn from one another? We examine these questions by exploring substantive topics (Revolutions, State Formation, Colonialism, Globalization, Cultural Clash, etc.) in relation to theoretical and methodological issues (synchrony vs. diachrony, time-narrative, event, contingency, agency, and comparative methodology). 6 credits, SI, IS, Winter-N. Sohrabi
237. Explorations in Social Data Analysis What does it mean if something is statistically significant? Why does it matter? This course will ask and answer these questions by providing social science students with the basic statistical tools for data analysis and interpretation. The course covers the foundations of univariate and inferential statistitics up to regression. Using the statistical program SPSS, well focus much more on learning to apply social statistics and how to make sense of the findings, rather than statistical theory. No prior knowledge of statistics is required. 6 credits, SS; FSR, QRE, Fall-E. Raleigh
238. 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, WR2, QRE, Winter-A. Nierobisz
239. 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, Winter-J. Levi
240. 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. Prerequisite: Sociology and Anthropology 110 or 111 or permission of instructor. 6 credits, SS, WR; SI, WR2, IS, Offered in alternate years, Not offered in 2013-2014
241. 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. Prerequisite: The department strong recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS, RAD; SI, IS, Not offered in 2013-2014

## 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, SS, RAD; SI, IS, Winter-J. Levi252. Middle East: History and Society in Comparative Perspectives The great majority of the modern Middle east was born in the aftermath of WWI and breakdown of the Ottoman Empire. Iran was an exception as it lay outside the Ottoman fold, but in many respects its modern history developed in tandem as it reacted to the same influences. This course examines the state and society in the entire Middle East from the early nineteenth century to the present. Particular attention is paid to Turkey, Iran and Egypt, the largest countries in the Middle East that are here approached from a comparative angle. Prerequisite: The department strong recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SI, IS, Spring-N. Sohrabi
253. Ethnography of Africa Pairing classics in Africanist anthropology with contemporary re-studies, we explore changes in African societies and in the questions anthropologists have posed about them. We address issues of representation and self-presentation in written ethnographies as well as in African portrait photography. We then turn from the visual to the invisible realm of African witchcraft. Initiation rituals, war, and migration place selfhood and belonging back in this-world contexts. In-depth case studies include, among others: the Cameroon Grassfields, the Bemba of Zambia, and the Nuer of South Sudan. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS, WR, RAD; SI, WR2, IS, Not offered in 2013-2014
254. Culture and Politics in India India is a region of immense diversity where more than one billion people live. We 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. We will consider: 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? Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS, RAD; SI, IS, Not offered in 2013-2014
255. 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. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS; SI, IDS, Fall-J. Levi
256. 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. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS; SI, IS, Fall-J. Levi
257. 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 nationstate 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. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS, WR, RAD; SI, WR2, IS, Not offered in 2013-2014
258. Anthropology of Health and IIIness 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: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS, WR; SI, WR2, IS, Not offered in 2013-2014
259. Globalization, Gender and Militarism This course examines the relationship between globalization, gender and militarism to understand how globalization and militarism are gendered, and examines processes through which gender becomes globalized and militarized. We will take up the different theoretical and disciplinary approaches to this project, as well as the perspectives and methods put forth for studying gender, race and class transnationally. We will explore how economic development, human rights, and the politics of resistance are gendered. 6 credits, SS, RAD; SI, IS, Not offered in 2013-2014
260. Indigenous Archaeology: New Pathways for Collaborative Research Since the passage of the Native American Graves Protection and Repatriation Act in 1990 archaeologists have attempted to develop more ethical and equitable relationships with Native American communities. Following indigenous critiques of archaeology, this course will consider the value of indigenized approaches to the study of Native American history and heritage. Through our discussions we will situate the practice of research on and about Native Americans in terms of its unique social, historical, and legal contexts, examining how contemporary dialogues about Native sovereignty, cultural property, and Indigenous identity intersect with the methods we use to represent Native North America. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS; SI, IDS, Not offered in 2013-2014
261. Race and Ethnicity in the United States With the election of President Obama, many pundits declared we are now in a post-racial society. However, as social scientists, we know race continues to shape our lives. This course provides an overview of the study of race and ethnicity through a sociological framework. Primarily, we analyze race through the lens of inequality, analyzing how race intersects with gender and class to shape identity and opportunity. We also explore how racial groups are represented in the media. In addition, we examine the fluidity of racial categories, concluding with a discussion of interracial unions and the multiracial population in the United States. 6 credits, SS, RAD; SI, IDS, Winter-E. Raleigh
262. 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, Not offered in 2013-2014
263. 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 2013-2014
264. Immigration and Immigrants in Europe and the United States Immigration has always been a defining feature of American society, yet in European countries it has also been raising a number of questions about national identity, citizenship, belonging and rights. Who are contemporary immigrants in the United States and Europe? How are they received in host societies? How do they participate in and become incorporated into the host society? What ties do they maintain to their countries of origin? How do policies respond to and shape immigrants and immigration? In this course, we will consider these questions and more from the perspectives of immigrants as well as host societies. 6 credits, SS; SI, IS, Not offered in 2013-2014
265. 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, $S / C R / N C, S S$; SI, Spring-A. Falcón
266. Guatemala Program: Directed Reading During winter break participants are asked to read selected works chosen to provide background on Guatemalan history, Mayan culture, and contemporary social issues in preparation for the field seminar. Students will write an integrative essay on this material and participate in discussions covering the readings during the first week of the program. 2 credits, ND; NE, Winter-J. Levi
267. 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, Winter-J. Levi
268. 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 2013-2014
269. 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: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS; SI, IS, Not offered in 2013-2014
270. Sociology of Adoption and Assisted Reproduction Where do babies come from? Whereas once the answer was relatively straight forward, the growth of assisted reproductive technologies (ART) and adoption has changed the field of potential answers. Nowadays babies can come from birthmothers, egg donors, and surrogates. In this course we will examine the meaning and making of families across these different types of formations and contextualize the popularity of ART relative to the decrease in adoption. We will take a sociological approach to analyzing these issues, paying particular attention to questions surrounding women's rights, baby "markets," and the racialization of children placed for adoption in the U.S. Prerequisite: Prior Sociology/Anthropology course or permission from the instructor. 6 credits, SI, IDS, Offered in alternate years, Spring-L. Raleigh
271. 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: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, SS; SI, Fall-N. Sohrabi
272. 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, Radcliffe-Brown, LeviStraus, Harris, Sahlins, Bourdieu, Geertz, and Appadurai. The reading strikes a balance between ethnographic accounts and theoretical statements. Prerequisite: Sociology/Anthropology 110 or 111 or permission of the instructor. 6 credits, SS, RAD; SI, IS, Spring-J. Levi
273. Environmental Anthropology Can we learn to use resources sustainably? Are there people in the world that know how to manage their environment appropriately? What are the causes behind environmental degradation? These questions are commonly asked in public and academic forums but what discussions often overlook is the fact that these are fundamentally social questions and thus social analysis is needed to understand them fully. This course aims at exploring key issues of human/nature interactions by using anthropological critiques and frameworks of analysis to show how culture is a critical variable to understanding these interactions in all their complexity. Prerequisite: The department strongly recommends that 110 or 111 be taken prior to enrolling in courses numbered 200 or above. 6 credits, WR; SI, WR2, IS, Winter-C. OcampoRaeder
274. 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 2013-2014
275. Advanced Sociological and Anthropological Writing This course explores different genres of writing and different audiences for writing in the social sciences, focusing particular attention on scholarly articles published in professional journals in sociology and anthropology. To that end, students both analyze sociological and anthropological articles regarding commonalities and differences in academic writing in our two sister disciplines. Students work on their own academic writing process (with the help of peer-review and instructor feedback). The writing itself is broken down into component elements on which students practice and revise their work. Prerequisite: Completion of Sociology/Anthropology 240 or submission of a topic statement in the preceding spring term and submission of a comps thesis proposal on the first day of fall term. Senior Sociology/Anthropology major or consent of the instructor. 6 credits, SS, WR; SI, WR2, Fall-M. Sehgal
276. Integrative Exercise Senior sociology/anthropology majors fulfill the integrative exercise by writing a senior thesis on a topic approved by the department. Students must enroll in six credits to write the thesis, spread as the student likes over Fall, Winter, and Spring terms. The process begins with the submission of a topic statement in the preceding spring term and concludes with a public presentation in spring of the senior year. Please consult the Sociology and Anthropology website for a full description. 6 credits, $S / C R / N C, N D ; N E$, Fall, Winter, Spring-Staff

## Other Courses Pertinent to Sociology/Anthropology:

AFAM 182 Black Identity and Belonging
ARCN 246 Archaeological Methodology (Not offered in 2013-2014)
ARCN 395 Archaeology: Science, Ethics, Nationalism and Cultural Property
CCST 210 Global/Local Perspectives (Not offered in 2013-2014)
ENTS 244 Biodiversity Conservation and Development
ENTS 301 Science and Society
WGST 200 Gender, Power and the Pursuit of Knowledge
WGST 240 Gender, Globalization and War (Not offered in 2013-2014)

## SOUTH ASIAN STUDIES CONCENTRATION

<a href="https://apps.carleton.edu/curricular/asst/faculty/">Browse faculty and Staff</a>
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 (Literary/Artistic Analysis; Humanistic Inquiry; Social Inquiry)

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 Indian Fiction (Not offered in 2013-2014)
ENGL 251 Contemporary Indian Fiction (Not offered in 2013-2014)
HIST 161 History of Modern India c. 1700-1947
HIST 167 History of Modern South Asia 1947 Onwards
HIST 266 History of Islam in India (Not offered in 2013-2014)
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
ECON 241 Growth and Development (Not offered in 2013-2014)
ENGL 245 Bollywood Nation
ENGL 252 Caribbean Fiction
ENGL 335 England in India/India in England
HIST 259 Women in South Asia: Histories, Narratives and Representation
HIST 263 Disease, Medicine and Empire (Not offered in 2013-2014)

MUSC 180 or 280 Raga: Vocal or Instrumental Study of Hindustani Music
MUSC 181 or 281 Sitar
MUSC 248 Music of India
POSC 237 Southeast Asian Politics
RELG 100 Imagining Home: Religions in Diaspora
RELG 122 An Introduction to Islam
RELG 123 The Qur'an (Not offered in 2013-2014)
RELG 155 Religions of Southeast Asia (Not offered in 2013-2014)
RELG 163 The Qur'an
RELG 250 Buddhism and Ecology
RELG 251 Theravada Buddhism (Not offered in 2013-2014)
RELG 252 Mahabharata: The Hindu Book of War and Peace (Not offered in 2013-
RELG 253 Tibetan Buddhism (Not offered in 2013-2014)
RELG 255 Social Engagement in Asian Religions
RELG 256 Modern Hinduism: Encounters with the West (Not offered in 2013-2014)
RELG 257 Shari'a
RELG 259 Gandhi (Not offered in 2013-2014)
RELG 260 Tantra: Secrecy, Sex, and the Sublime
RELG 261 Hearing Islam
RELG 263 Islamic Mysticism (Not offered in 2013-2014)
RELG 265 Religion and Violence: Hindus, Muslims and Jews
RELG 266 Religion and the Senses
RELG 268 Encountering Islam: Dialogue and Difference (Not offered in 2013-2014)
RELG 289 Global Religions in Minnesota
RELG 350 Emptiness (Not offered in 2013-2014)
RELG 362 Spirit Possession
Capstone Course: For 2013-2014, the designated capstone course is: MUSC 248 Music of India

## SPANISH (SPAN)

## 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 OffCampus 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: Most students in our courses are not necessarily majoring in Sapnish. Often students continue to take Spanish while pursuing a major in a different department simply because they are interested in the language and culture. An increasing number of students pursue the certificate of advanced study (the equivalent of what would be considered a minor area of study at many universities and colleges).

Students who pursue the Certificate of Advanced Study in Spanish are required to complete 36 credits beyond the 103 level with grades of C - or better in each course. 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 the credit requirement. The courses must be taught in Spanish. We limit the number of non-Carleton OCS credits that can be applied to the certificate to a total of 12 , and these credits do not substitute for the 12 credits at the 300 -level that these students must complete.

The Certificate allows for a maximum of flexibility in that students can take as many as 24 credits in the 204-299 range. However, the most common scenario is that these students follow the progression that our majors follow and benefit from the general goals of the Spanish major.

Students need to fill out the Certificate Form and turn it into the Department's Adminstrative Assistant, LDC 340, mtatge@carleton.edu. Forms must be completed no later than fall term of senior year. Courses being taken during that term will be counted upon completion of course.

## 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-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, J. Cerna-Bazán, H. Huergo
106. Introduction to Public Speech in Spanish In this course the students will learn the process of shaping ideas into an effective oral presentation in Spanish. We will pay particular attention to the process of selecting supporting data and other materials as well as the mechanics of arranging ideas in a logical manner, and delivering the speech effectively. The course will offer several opportunities for impromptu speaking experiences. Through the course, the students will prepare and deliver specialized forms of public speeches. Emphasis will be placed on a variety of types of persuasive and ceremonial speeches. There will be some mandatory films and talks outside of class. Prerequisite: Spanish 204 or its equivalent. credits, HI, IS, WinterP. Álvarez Blanco
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, ND, RAD; LA, IS, Not offered in 2013-2014
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 Paíz, everyday on the internet (El Paíz), 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/CR/NC, ND; LA, IS, Fall, Winter, Spring-S. López
109. Madrid Program: Contemporary Spanish History An overview of Spanish history, culture, and politics with an emphasis on current issues such as immigration, education laws, the european Union, unemployment, and nationalism. 4 credits, ND; LA, IS, Fall-H. Huergo
110. Improving Spanish through Translation The focus of this course is to review some key grammatical structures through communicative translation exercises, as well as to become more aware of pragmatic and discursive differences between Spanish and English. Translation exercises are prepared at home and class time is devoted to discussion and constructive criticism about grammar and style. The course will be taught primarily in Spanish. This course will enhance students' skills in Spanish writing, reading, speaking and listening. Prerequisite: Spanish 204. 6 credits, HI, IDS, Offered in alternate years, Not offered in 2013-2014
111. Peru Program: Writing and Conversation This course aims at further development of communicative skills in Spanish. The strong emphasis on student presentations and interactions with native speakers are oriented toward a greater fluency in spoken Spanish. The course focuses on the grammar of compound sentence and structures beyond the sentence level, and includes practice of different registers and varieties of writing in Spanish. Written work and class discussion focus on relevant aspects of Peruvian and Latin American social reality. Prerequisite: Spanish 204 or equivalent. 6 credits, AL; LA, IS, Spring-J. Cerna-Bazán
112. 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. 6 credits, AL, RAD; LA, IS, Not offered in 2013-2014
113. Two Voices: Gabriel García Márquez and Laura Restrepo Considered one of the greatest writers of the twentieth century, Gabriel García Márquez defines magical realism. His works record the reality of his native Colombia, embedding it within the mythic patterns of Latin American cultures and histories. Like García Márquez, Laura Restrepo began her writing career as a journalist, but her lens remains firmly anchored in the reality of Colombia's encounters with political violence and drug cartels. In what she calls "report style," Restrepo, too, tells the story of Colombia. The course focuses on selected works by these two authors, a study of contexts, themes, and styles. Prerequisite: In translation. 6 credits, LA, IS, Fall—B. Boling
114. 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, $A L ; L A$, IS, Not offered in 2013-2014
115. 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, $A L$, RAD; LA, IS, Winter-S. López
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, AL, RAD; LA, IS, Spring-P. Álvarez Blanco
117. Spanish Seminar in Madrid: Spanish and Italian Art in the Age of Velazquez This course is a study of the artistic exchange between Spain and Italy during the sixteenth and seventeenth centuries. Artists studied include Michelangelo, Caravaggio, Bernini, and the stay of Velazquez in Rome. The first part of the course takes place in Rome and the rest in Madrid. Prerequisite: Spanish 205 or proficiency. 6 credits, $A L ;$ LA, IS, Fall-NonCarleton Faculty
118. 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 2013-2014
119. 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 twentieth-century art, film, and literature. Extra time. Prerequisite: Spanish 205 or proficiency. 6 credits, $A L$; LA, IS, Not offered in 2013-2014
120. 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, $A L, R A D ; L A$, IS, Winter-B. Boling
121. 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, $A L$; LA, IS, Not offered in 2013-2014
122. 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, AL, RAD; LA, IS, Not offered in 2013-2014
123. Postwar Central American Llterature 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. 6 credits, AL, RAD; LA, IS, Offered in alternate years, Spring-Y. Perez
124. Peru Program: Diversity, Conflict and Culture in Peru This class focuses on key cultural manifestations arising from class, social, ethnic and regional conflicts of contemporary Peru. Intellectual and artistic production as well as materials drawn from popular culture sources are examined for class discussion and projects. Classes are supplemented by visits to relevant sites and by lectures by local intellectuals. Prerequisite: Spanish 204 or equivalent. 6 credits, AL; HI, IS, Spring-J. Cerna-Bazán
125. The Poem as Artifact: Art and Work in Contemporary Spanish American Poetry Poetry will be studied as an activity that shares a common ground with other social practices. In particular, we will examine particular moments and cases of Latin American literature in which the poem (the making of poetry and the form of the text) has been conceived in its connection with work, that is, with the process of transformation of materiality into specific "objects," involving a necessary social use of time and space. We will explore this topic starting with Modernismo and, after covering the Vanguardias, will get to some key developments from the 1960s to present. Prerequisite: Spanish 204 or equivalent. 6 credits, AL; LA, Fall—J. Cerna-Bazán
126. Spanish Seminar in Madrid Program: Independent Reading Basic readings in Spanish history and culture in preparation for the program. 2 credits, $S / C R / N C, N D ; N E$, Fall-H. Huergo
127. Greek and Christian Tragedy This course is a comparative study of classical and Christian tragedy from Sophocles to Valle Inclán and from Aristotle to Nietzsche. Classes alternate between lectures and group discussions. Course requisites include a midterm exam and a final paper. All readings are in Spanish, Sophocles and Aristotle included. Prerequisite: Spanish 205 or above. 6 credits, AL; HI, IS, Offered in alternate years, Not offered in 2013-2014
128. 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, AL, RAD; LA, IS, Not offered in 2013-2014
129. Murder as a Fine Art: The Detective Novel in Latin America We will study the socio-historical factors that gave rise to the genre as well as some of its classical predecessors (Poe, Chandler). We will then turn our attention to some prominent heirs of this genre in Latin America (Borges, Piglia, Bolaño) and end by studying why in contemporary Central American literature the genre is enjoying a resurgence (Menjívar, Castellanos Moya and Rey Rosa). We will study the specific traits the genre has adopted in Latin America and how it has become a mirror that often reflects the political and social realities confronting the region, particularly in Central America. Prerequisite: Spanish 205 or above. 6 credits, $A L, R A D ; ~ L A, ~ I S, ~ W i n t e r-Y . ~ P e ́ r e z ~$
130. Contemporary Fiction and the Market In this course we will be studying the various meanings of what has been labeled, esthetically and sociologically, as the Post-Modernist age, or Late Modernity. We will also study the relationship between "postmodernism" and what has been called the "culture of contentment" or "culture of well-being," and we will attempt to understand the interactions that exist between culture, market and dominant ideology. To develop this theme we will focus on Spain, but will also continually establish relationships with other countries. This course includes many cultural products (novels, films, documentaries, animated essays, visual poetry, gag cartoons, graphic novel, comics, etc.). Evening films, guest lectures. Prerequisite: Spanish 205 or Spanish 207. 6 credits, LA, IS, Fall-P. Álvarez Blanco
131. 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, AL; LA, IS, Not offered in 2013-2014
132. Baroque Desires According to Graciáns influential The Art of Worldly Wisdom (1647), it is essential "to have always something still to desire, that one may not be unhappy in his happiness." This course explores this curious conundrum--that perhaps real happiness lies in the unfulfilment of desire--through a number of "biggies," including Cervantes, Therese of Avila, John of the Cross, Garcilaso, Quevedo, Calderón, and the precursor of Nietzsche's Gay Science--Gracián himself. If by the end of the course you still do not understand Gracián, at least you will know why Mick Jagger "can't get no satisfaction." Prerequisite: Spanish 205 or above. 6 credits, AL; HI, IS, Winter-H. Huergo
133. 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, Májera, 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 equivalent. 6 credits, $A L, R A D ; L A, I S$, Not offered in 2013-2014
134. 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, $A L, R A D ; L A, I S$, Not offered in 2013-2014
135. 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 cosmopolitan city through a variety of disciplines, including Urban Studies, Philosophy, Architecture, Sociology, and Spanish poetry and fiction. 6 credits, AL, RAD; LA, IS, Fall-H. Huergo
136. 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, Not offered in 2013-2014
137. The Spanish Civil War Considered by many historians the beginning of the II World War, 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 was 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, AL, RAD; HI, IS, Not offered in 2013-2014
138. Race and Nation in Caribbean Literature We will study the Caribbean as the space, par excellence, of
imperial, racial and cultural intersections. With a special emphasis on literary production in the Spanish Caribbean, we will focus on the formation of hegemonic nationalist discourses that often silenced the region's great racial and cultural diversity. We will analyze symbolic and cultural constructions of power rationalized with complex racialized beliefs to sustain the social and political structures in these countries. We will read texts by José Martí, Juan Francisco Manzano, Lydia Cabrera, Nancy Morejón, Nicolás Guillén, and Derek Walcott among others. Prerequisite: Spanish 205 or above. 6 credits, AL, RAD; LA, IS, Not offered in 2013-2014
139. Jorge Luis Borges: Less a Man Than a Vast and Complex Literature Borges once said about Quevedo that he was less a man than a vast and complex literature. This phrase is probably the best definition for Borges as well. We will discuss the many writers encompassed by Borges: the vanguard writer, the poet, the detective short story writer, the fantastic story writer, the essayist. We will also study his many literary masks: H. Bustoc Domecq (the apocryphal writer he created with Bioy Casares) a pseudonym he used to write chronicles and detective stories. We will study his impact on contemporary writers and philosophers such as Foucault, Derrida, Roberto Bolaño, etc. Prerequisite: Spanish 205 or above. 6 credits, AL; LA, IS, Offered in alternate years, Spring-J. Brioso
140. Yours Truly: The Body of the Letter This course will focus on letters and their significance as acts of symbolic and material exchange, as objects that bear the mark of the bodily act of writing, and as a staging of the scene of writing itself. We will study different types of letters (love letters, secret letters, literary letters, letters imbedded in other texts, etc.), but always as the site of production of a modern and gendered self. Letters by: Flora Tristan, Victoria Ocampo, Teresa de la Parra, Virginia Woolf, Rosa Luxemburg, Simone de Beauvoir and theoretical texts by Monsiváis, Chartier, Bouver, Derrida, Deleuze and Guattari, among others. Prerequisite: Spanish 205 or above. 6 credits, AL, RAD; LA, IS, Offered in alternate years, Not offered in 2013-2014
141. Integrative Exercise 6 credits, S/NC, ND, Fall, Winter, Spring-Staff

## THEATER AND DANCE

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. We recognize Dance as a global phenomenon and seek to provide opportunities for crosscultural studies and scholarship.

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
100. Meaning In Motion: Dance as Culture The study of dance is the study of culture. We will look at dance as culturally-coded, embodied knowledge and investigate dance forms, contexts and micro cultures across the globe, analyzing how social identities are "signaled, formed, and negotiated through bodily movement." We will examine, cross-culturally, the function of dance in the lives of individuals and societies through various lenses including gender, Africanist and ethnograpic. We will read, write, view videos, attend live performances, discuss and move. This course in dance theory and practice will include a weekly movement lab. No previous dance experience necessary. 6 credits, AI, WR1, IS, Fall—J. Howard
107. Ballet I 1 credits, $S / C R / N C, A L$; ARP, Fall, Winter, Spring—J. Bader
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/CR/NC, AL; ARP, Spring-J. Shockley
148. Modern Dance I: Technique and Theory 1 credits, S/CR/NC, AL; ARP, Fall, Winter, Spring—D. McCoy
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, $S / C R / N C, A L ; A R P$, 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/CR/NC, AL; ARP, Fall, Winter, Spring-D. McCoy
204. Fall Dance Intensive rehearsal and performance of a work commissioned from a professional guest choreographer. Open to all levels. 1 credits, S/CR/NC, AL; ARP, Not offered in 2013-2014
205. Winter Dance Intensive rehearsal and performance of a work commissioned from a professional guest choreographer. Open to all levels. 1 credits, S/CR/NC, AL; ARP, Winter-Staff
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
208. Ballet II For the student with previous ballet experience. This course emphasizes articulation of technique and development of ballet vocabulary. 1 credits, S/CR/NC, AL; ARP, Fall, Winter, Spring-J. Bader
214. Fall Dance, Student Choreography For students enrolled in Dance 204, supervised student choreography with two public showings. 1 credits, S/CR/NC, AL; ARP, Not offered in 2013-2014
215. Winter Dance, Student Choreography For students enrolled in Dance 205, supervised student choreography with two public showings. 1 credits, S/CR/NC, AL; ARP, Winter-Staff
253. 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, body-mind centering). The emphasis will be to discover effortless movement, balance in the body and an integration of self in moving. 3 credits, AL; ARP, Winter-J. Shockley
255. Performing Politics We will investigate ways in which contemporary politics can influence the creation of performance work. We will explore individual identity and community-based art as inspirations for making new performance material. The interdisciplinary focus of the course will include techniques and strategies for incorporating movement, theater, original writing and voice in creating new work. There will be theoretical and
artistic readings, video viewings, and intimate, generous discussion. Students will be asked to perform each class period and participate in a final public sharing of their work. Open to all levels of experience and those willing to try performance. 6 credits, $A L$; ARP, Not offered in 2013-2014
266. 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, IDS, Not offered in 2013-2014
268. The Body as Choreographer "The pleasure of the text is that moment when my body pursues its own ideas-for my body does not have the same ideas I do." -Roland Barthes. Through guided movement sessions we will explore the body as a source for ideas. Using "Authentic Movement," experiential anatomy practices and computer technology, students will generate several small compositions and one larger gallery project using the computer software, Isadora. Virtual and live bodies will meet in performance. Performance attendance and readings on the body, technology and dance will be required. For both beginning and advanced dance students. 6 credits, AL; ARP, Winter-J. Howard
300. Modern Dance III: Technique and Theory Intensive work on technical, theoretical, and expressive problems for the experienced dancer. 1 credits, S/CR/NC, AL; ARP, Fall, Winter, Spring-J. Shockley
301. 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/CR/NC, AL; ARP, Fall-W. McClusky
309. Ballet III 1 credits, S/CR/NC, AL; 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, $S / C R / N C, A L$; $A R P$, 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 (Not offered in 2013-2014)
THEA 229 Make-Up Design
THEA 236 Scenic and Lighting Design for the Theater (Not offered in 2013-2014)
THEA 237 Scenic Design for the Performing Arts
THEA 239 Topics in Theater: Costume Design
b) 18 credits from the following courses in practical theater:

DANC 150 Contact Improvisation
DANC 253 Movement for the Performer
THEA 110 Beginning Acting
THEA 185 The Speaking Voice
THEA 240 Directing I (Not offered in 2013-2014)
THEA 241 Directing II (Not offered in 2013-2014)
THEA 246 Playwriting (Not offered in 2013-2014)
THEA 325 Performing Shakespeare (Not offered in 2013-2014)
c) 18 credits at the 300 level, at least six of which should be English 310 or Theater Arts 351 if possible (additional courses may be added to this group as approved):

THEA 312 Problems in Acting
THEA 320 Live Performance and Digital Media (Not offered in 2013-2014)
THEA 325 Performing Shakespeare (Not offered in 2013-2014)
ENGL 310 Shakespeare II
GRK 351 Aristophanes
RUSS 351 Chekhov
SPAN 342 Latin American Theater: Nation, Power, Gender
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 (Not offered in 2013-2014)
ENGL 116 Introduction to English Drama (Not offered in 2013-2014)
ENGL 129 Introduction to British Comedy
ENGL 213 Christopher Marlowe (Not offered in 2013-2014)
ENGL 214 Revenge Tragedy (Not offered in 2013-2014)
ENGL 244 Shakespeare I
ENGL 258 Contemporary American Playwrights of Color
ENGL 282 London Theater Program
THEA 175 Drama/Theater/Text (Not offered in 2013-2014)
THEA 225 Theater History and Theory (Not offered in 2013-2014)
THEA 242 Twentieth Century American Drama
e) 2 credits of THEA 190, Players Production
f) 6 credits of 400, Integrative Exercise

## Theater Courses

110. 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, AL; ARP, Fall, Winter-R.

## Bechtel, D. Wiles

115. 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, Not offered in 2013-2014
116. 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 2013-2014
117. 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, $A L ; A R P$, Winter-D. Wiles
118. 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/CR/NC, AL; ARP, Fall, Winter, Spring-R. Bechtel, R. Weiner, D.

## Wiles

211. 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 2013-2014
212. Theater History and Theory The theater has often had a vexed and volatile relationship with its cultural moment, and its history is as much one of revolution as of evolution. This course will look across the broad contours of theater history to examine the questions and challenges that consistently recur, including the relationship between representation and the real, between politics and aesthetics, and between the text and the body. Historical eras covered will include ancient Greece, medieval Japan, early modern Europe, and twentieth and twenty-first century Europe and America. Some class time will be spent doing performative explorations of historical texts. 6 credits, AL, WR; LA, WR2, Offered in alternate years, Not offered in 2013-2014
213. Avant-garde Theater and Peformance "Make it new!" was the rallying cry of the modernists, and ever since, the theater has never ceased its efforts to break both aesthetic and social conventions, boundaries, and taboos. Beginning with some of the important precursors of the twentieth century--Artaud, Brecht, and Meyerhold--this course will explore the history and theory of the contemporary avant-garde, charting the rise of interdisciplinary "performance" and exploring such topics as politics and aesthetics, site-specificity, body art, solo performance, and multimedia. Students will also spend significant time creating their own performance works. 6 credits, LA, Fall—R. Bechtel
214. Makeup Design Theory and practice of two and three dimensional makeup design for the performer. This course explores corrective, character and specialized makeup techniques as well as rendering techniques. 3 credits, AL; ARP, Not offered in 2013-2014
215. Set Design as Site Specific Sculpture In this course we will explore set design from the perspective of site specific sculpture, working in the new theater at the Weitz Center for Creativity we will collaboratively design and help construct the set for the upcoming student production. The work in this class will be intense and front loaded (mostly weeks 1-6). Several field trips and group work outside of the scheduled class time will be required. Prerequisite: Theater, construction, or sculpture experience. 3 credits, $S / C R / N C, A L$; $A R P$, Not offered in 2013-2014
216. 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, $N D ; A R P$, Not offered in 2013-2014
217. 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 2013-2014
218. Scenic Design for the Performing Arts This course will focus on the art and practice of creating scenic designs for the performing arts. It will introduce basic design techniques while exploring the collaborative process involved in bringing scenery from concept to the stage. The course will include individual and group projects utilizing collage, sketching, and model-making. 3 credits, AL; ARP, Fall—Staff
219. Costume Design for Theater An introductory course in costume design. This course will examine the basic concepts of design and how they apply to costumes. In depth analysis of the script and characters will lead to an exploration of how costume design can be used to enhance the production. Basic rendering techniques and clothing history will also be studied. 3 credits, AL; ARP, Spring-M. Kelling
220. 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
221. 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, Not offered in 2013-2014
222. Directing II Directing II is a practical directing workshop. Each member of the class will plan a full production. Each of you will also direct a short play or a full scene. 3 credits, ND; ARP, IS, Not offered in 20132014
223. 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, Spring-D. Wiles
224. 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/CR/NC, AL; ARP, Not offered in 2013-2014
225. 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, $A L$; ARP, IS, Spring-R. Bechtel
226. Creativity and Aesthetics With the rise of the "creative economy" and the "creative class," "creativity" itself has become a buzzword. But what do we talk about when we talk about creativity? This course will begin with the premise that creativity is not necessarily an innate attribute, but one that can be cultivated, and students will explore and expand their own creative resources. Importantly, we will explore the intersection of personal creativity and cultural aesthetics. How is creativity released, restrained, or channeled through aesthetics? In addition to theoretical readings, student artists of all kinds will have the opportunity to create a variety of projects. 6 credits, ARP, Offered in alternate years, Spring-R. Bechtel
227. Live Performance and Digital Media Digital media has so infiltrated live performance that it has become almost as common as sets, lights, and costumes. With video technology becoming increasingly powerful and affordable, the screen has become ubiquitous on stage, sometimes eclipsing the performers. Media culture has also become a recurrent subject for critical exploration both on and off stage. In this class, students will learn the software and hardware skills necessary to incorporate digital media into performance projects, as well as the historical and theoretical context necessary to bring a critical approach to their work. Prerequisite: Any course in Theater Arts, Dance, Cinema and Media Studies, Studio Art, creative writing or musical composition. 6 credits, AL; ARP, Offered in alternate years, Not offered in 2013-2014
228. Performing Shakespeare This course will explore approaches for taking Shakespeare's text from page to stage. Using methods developed in theaters in the United States and the United Kingdom, students will prepare written analysis and construct performances that explore Shakespeare's use of formal rhetoric and poetic imagery and examine some of the ethical and political questions posed in the plays. Using video and audio recordings, students will critically examine various approaches to performing Shakespeare in the United States and the United Kingdom over the last century. Prerequisite: One or more of the following courses: Theater 110, 185, 190, 240/241, 211, or 312. 6 credits, $A L, W R$; ARP, WR2, Offered in alternate years, Not offered in 20132014
229. Integrative Exercise 6 credits, ND; NE, Winter, Spring

## WOMEN'S AND GENDER STUDIES (WGST)

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, (Political Science 355 for 2013-2014) 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 or 112
One methodology course, Women's and Gender Studies 200 or 234
One capstone seminar, Political Science 355
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, Winter-M. Sehgal
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, Not offered in 2013-2014
112. Gender, Power and the Pursuit of Knowledge 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, Fall—M. Sehgal
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 U.S. 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, Not offered in 2013-2014
114. Sexuality and Religious Controversies in the United States and Beyond From pulpits to political campaigns, notions of sexuality are deployed in religious discourse to develop definitions of morality, ethics, family, marriage, gender, citizenship, civil liberties, righteousness and sinfulness. Religious concepts have also been used as creative tools to repress, liberate, legislate, and re-vision various conceptions of sexuality. This course will examine the ways in which religious ideologies, theologies, motivations, and practices function in both public and private contexts in debates over a range of topics, including homosexuality, abortion, and public comportment. We will consider questions about how ideas of sexuality are established as normative through scriptural, ritual, and retorical devices. 6 credits, HU, RAD; HI, IDS, Offered in alternate years, Spring-S. Sippy
115. Feminist Practices, Activism and Social Change This course introduces students to the study of feminist practices. What is the relationship of feminist theory to feminist practice? What is feminist activism? What tactics and strategies have feminist individuals and collectives undertaken for social change? How have some strategies been successful, while others have failed? Through a set of course readings and open smallgroup dialogue the course will look at a variety of tactics and strategies feminists have undertaken for social change. The course will enable students to experiment with some strategies, learn through the process of doing and reflect on theory and practice through hands-on learning projects. 6 credits, SS, RAD; SI, IDS, Not offered in 2013-2014
116. 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, Not offered in 2013-2014
117. 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, Not offered in 2013-2014
118. 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, ND, RAD; SI, IS, Not offered in 2013-2014
119. Gender, Globalization and War This course examines the relationship between globalization, gender and militarism to understand how globalization and militarism are gendered, and processes through which gender becomes globalized and militarized. We will focus on the field of transnational feminist theorizing which both "genders the international" and "internationalizes gender." We will take up the different theoretical and disciplinary approaches to this project, as well as the perspectives and methods put forth for studying gender, race and class transnationally. We will explore how economic development, human rights, and the politics of resistance (particularly in the NGO sector) are gendered. 6 credits, SS; SI, Not offered in 2013-2014
120. Women's Health Activism This course focuses on women's health movements and feminist activism around reproductive justice in the United States. Our explorations will be linked to a Carleton art gallery exhibition titled EveryBody! that highlights the use of graphic teaching aids, polemical publications and artistic
projects by women's health movements to teach women to celebrate "embodied self-knowledge." Our intellectual focus will be on the role of feminist activism in shifting the discourse around women's health from medicalized pathology to empowerment. The course will have a civic engagement component that encourages students to develop creative visual approaches to feminist health education in the community. 6 credits, $S S$, RAD; HI, IS, Not offered in 2013-2014
121. Gender, Justice and Community Engagement This civic engagement course will have a changing thematic focus on a social issue that will bring feminist theory and practice together into a fieldwork setting. Beginning from a vision of gender justice that necessarily involves racial, sexual, and economic dimensions, we will explore feminist politics through collaborations with communities on and off-campus. The course will enable students to engage in self-reflexive activism, learn through the process of doing, explore theories of gender and contribute to local community organization's efforts to bring about gender justice. Prerequisite: Womens and Gender Studies 234 or permission of instructor. 6 credits, SS, RAD; SI, IDS, Not offered in 2013-2014
122. Asian Mystiques Demystified This class will focus on the topic of Asian sexuality and gender, considering traditional, transnational, and transgressive representations of Asian sexualities, femininities, masculinities and bodies. Often associated with paradoxical images of sensuality, spirituality, repression, and femininity, Asian sexuality has a long history, shaped by enduring colonial imaginaries and our transnational, capitalist present. Tracing a genealogy of Asian mystiques, we will study classical sources that have served as "prooftexts" for these images, and will then focus our attention on Asian literature, film, art, religious traditions, and social movements that have produced their own, often alternative, conceptions of Asian sexualities and gender. 6 credits, HU; HI, IS, Offered in alternate years, Not offered in 2013-2014
123. Queer Ethnographies Across Latin America and the Caribbean This course focuses on the history and culture of non-normative gender and sexualities across Latin America, the Caribbean and its diaspora. Our focus will question the changing meanings and boundaries of gender and sexuality and their dynamics with race, sex and class across the continent, through the exploration of queer ethnographies primarily. Students will complete the course with a more complex understanding of the historical and cultural embeddedness of sexual identities, practices and communities in the Americas. 6 credits, SS, RAD; SI, IS, Not offered in 2013-2014
124. Integrative Exercise 6 credits, ND, Fall, Winter, Spring—Staff

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

This is a selective and suggestive list. A variety of courses are by visitors or offered only occasionally and may be considered. Contact the director for consideration of other courses to satisfy this requirement.

ARTH 220 The Origins of Manga: Japanese Prints
ARTH 223 Women in Art (Not offered in 2013-2014)
CAMS 225 Film Noir: The Dark Side of the American Dream
CLAS 214 Gender and Sexuality in Classical Antiquity
ENGL 217 A Novel Education
ENGL 218 The Gothic Spirit
ENGL 319 The Rise of the Novel
ENGL 327 Victorian Novel
FREN 241 The Lyric and Other Seductions
HIST 122 U.S. Women's History to 1877
HIST 123 U.S. Women's History Since 1877
HIST 229 Working with Gender in U.S. History
HIST 236 Women's Lives in Pre-Modern Europe (Not offered in 2013-2014)
HIST 259 Women in South Asia: Histories, Narratives and Representation
HIST 280 African in the Arab World (Not offered in 2013-2014)
HIST 286 Africans in the Arab World: On Site and Revisited (Not offered in 2013-2014)
JAPN 236 Classical Japanese Fiction: The Tale of Genji and Its World in Translation (Not offered in 2013-2014)

POSC 219 Protest, Power \& Grassroots Organizing: American Social Movements (Not offered in 2013-2014)
POSC 228 Foucault: Bodies in Politics (Not offered in 2013-2014)
POSC 276 Arendt: Imagination and Politics (Not offered in 2013-2014)
POSC 306 How Race Matters in American Politics* (Not offered in 2013-2014)
POSC 352 Political Theory of Alexis de Tocqueville*
POSC 355 Identity, Culture and Rights*
POSC 359 Cosmopolitanism* (Not offered in 2013-2014)
PSYC 224 Psychology of Gender (Not offered in 2013-2014)
RELG 188 Women and Religion: India and Abroad (Not offered in 2013-2014)
RELG 213 Sex and Scriptures (Not offered in 2013-2014)
RELG 227 Liberation Theologies
RELG 230 Feminist Theologies (Not offered in 2013-2014)
RELG 287 Many Marys
SOAN 226 Anthropology of Gender
SOAN 265 Globalization, Gender and Militarism (Not offered in 2013-2014)
SOAN 395 Ethnography of Reproduction (Not offered in 2013-2014)
SPAN 244 Spain Today: Recent Changes through Narrative and Film
SPAN 255 Women Dramatists in Latin America: Staging Conflicts (Not offered in 20132014)

WGST 112 Introduction to LGBT/Queer Studies (Not offered in 2013-2014)
WGST 231 Race, Gender, and Sexuality in Science (Not offered in 2013-2014)
WGST 234 Feminist Theory (Not offered in 2013-2014)
WGST 240 Gender, Globalization and War (Not offered in 2013-2014)
WGST 250 Women's Health Activism (Not offered in 2013-2014)

## WOMEN'S AND GENDER STUDIES CONCENTRATION

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): This is a selective and suggestive list. A variety of courses are by visitors or offered only occasionally and may be considered. Contact the director for consideration of other courses to satisfy this requirement.

ARTH 223 Women in Art
CAMS 225 Film Noir: The Dark Side of the American Dream
CLAS 114 Gender and Sexuality in Classical Antiquity
ENGL 218 The Gothic Spirit
ENGL 319 The Rise of the Novel
ENGL 327 Victorian Novel
HIST 122 U.S. Women's History to 1877
HIST 123 U.S. Women's History Since 1877
HIST 203 Papacy, Church and Empire in the Age of Reform
HIST 229 Working with Gender in U.S. History

HIST 236 Women's Lifes in Pre-Modern Europe
HIST 259 Women in South Asia: Histories, Narratives and Representation
HIST 280 Africans in the Arab World
HIST 286 Africans in the Arab World: On Site
HIST 330 Gender, Ethics and Power in Medieval France
JAPN 234 Modern Japanese Novel in Translation: Mothers/Daughters; Fathers/Sons
JAPN 236 Classical Japanese Fiction: The Tale of Genji and Its World in Translation
POSC 355 Identity, Culture, and Rights*
SOAN 226 Anthropology of Gender
WGST 200 Feminist Ways of Knowing
WGST 234 Feminist Theory
III. Capstone Seminar: Political Science 355 for 2013-2014. 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.

## Prior Credits Policy

Carleton accepts up to 36 credits toward the Carleton degree from the following: College Board Advanced Placement, Higher Level International Baccalaureate, select British A-level Examinations with grades of B or higher 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 general education 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 650 or above for 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 20132014 academic year:

ART AND ART HISTORY-Art History: Score of 5: 6 credits granted. Credits do not apply to the major. 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 the 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, 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 on-line 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 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 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.

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 or 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 4 or 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 4 or 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 2013-2014 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 6 or 7: 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 4 or 5: 6 credits granted, both introductory courses are required for upper-level courses in biology.
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.

## 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

$73 \%$ of the class of 2012 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.

## Carleton Off-Campus Study 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. Students participating in non-Carleton off-campus study programs pay a $\$ 500$ administrative fee. The fee will be charged to the student's Carleton account after the Off-Campus Studies Petition has been approved. During the 20132014 academic year, the following programs will be part of the Carleton curriculum. A brochure and application are available for each program in Leighton 119, as well as on the OCS website.

## Economics Seminar in Cambridge, summer term, 18 credits

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

Director: Mark Kanazawa, Professor of Economics

Courses:
ECON 221 Contemporary British Economy, 6 credits
ECON 222 The Industrial Revolution in Britain, 6 credits
ECON 223 J.M. Keynes and his Present-Day Legacy, 2 credits, S/CR/NC
ECON 224 The Determinants of Economic Growth and the Modern British Economy, 4 credits
Ireland through Writing and Literature: Irish Literature and Culture Seminar in Ireland, summer term, 18 credits

Irish literature, creative writing, and history and culture of Ireland will be the subjects of study while students explore the past and contemporary Ireland in Dublin, Belfast, and Louisburgh in County Mayo. Students will enjoy frequent excursions throughout Ireland, in addition to classroom and recreational facilities at Irish universities.

## Director: Gregory Hewett, Professor of English

## Courses:

ENGL 257 Contemporary Irish Literature, 6 credits
ENGL 260 Creative Writing in Ireland, 6 credits
ENGL 274 The History and Culture of Ireland through Literature, 6 credits
German Language and Culture Seminar in Berlin, Germany, fall term, 18 credits
Located in Berlin, on this language immersion program students improve their German language skills while gaining firsthand knowledge of Germany and its culture through homestays and weekend trips to places like Hamburg, Weimar, or Vienna.

Director: Sigi Leonhard, Professor of German

## Courses:

GERM 205 Intermediate Composition and Conversation, 6 credits
GERM 254 Theater in Berlin, 6 credits
GERM 275 Projects in the Arts, 4 credits, $\mathrm{S} / \mathrm{Cr} / \mathrm{NC}$
GERM 290 Independent Reading, 2 credits, $\mathrm{S} / \mathrm{Cr} / \mathrm{NC}$
Spanish Studies Seminar in Madrid, fall term, 18 credits
Spanish language program for advanced students, based in Madrid's Colegio Mayor Universitario Chaminade. 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 209 Politics and Culture in Contemporary Spain, 4 credits
SPAN 247 Spanish and Italian Art in the Age of Velazquez, 6 credits
SPAN 290 Independent Reading, 2 credits, S/CR/NC
SPAN 349 Madrid: Theory and Practice of Urban Life, 6 credits

## Biology Seminar in Australia and New Zealand, winter term, 18 credits

This program introduces students to the thrill and challenges of doing biological research in the field, surrounded by the amazing environment of New Zealand and Australia. The group will spend the majority of its time at field stations or in remote locations in both countries working on research projects alongside Carleton faculty and a team of teaching assistants, local university instructors, and naturalist guides.

Directors: Mark McKone, Professor of Biology; Matt Rand, Associate Professor of Biology; and Dan Hernández, Assistant Professor of Biology

## Courses:

BIOL 307 Evolutionary Ecology of Australia and new Zealand, 6 credits
BIOL 308 Ecology and Conservation in Australia and New Zealand, 6 credits
BIOL 309 Comparative Reproduction of Australian Vertebrates, 6 credits

## El Mundo Maya: Socio-Cultural Field Research Seminar in Guatemala and Chiapas, winter term, 18 credits

Through coursework and independent research, this program provides students with the opportunity to examine issues of cultural empowerment, community development, and social change in Guatemala. The program is based in Lake Atitlán and surrounding village communities. The program includes family stays, program seminars, independent field projects and travel to El Petén and the neighboring Chiapas, Mexico to provide and important comparative case for the coursework.

Director: Jay Levi, Professor of Anthropology

## Courses:

SOAN 241 Mesoamerican Cultures, 6 credits
SOAN 251 Resource Management, Community Development, and Social Change in Guatemala and Chiapas, 4 credits

SOAN 290 Directed Reading, 2 credits
SOAN 295 Field Methods and Individual Research Project, 6 credits

## English Theater and Literature Seminar in London, winter Term, 18 credits

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

Director: Pierre Hecker, Associate Professor of English

## Courses:

ENGL 278 Shakespeare's England, 6 credits
ENGL 282 London Theater, 6 credits
ARTH 261 The Art of Tudor and Stuart Britain, 3 credits
ARTS 262 Visualizing the Renaissance, 3 credits

## Geology Seminar in New Zealand, winter term, 18 credits

The program travels through the North and South Islands and visits a range of settings from mountains and glaciers, to terraced coastal plains and adjacent shoreline and shallow marine environments. Students will stay and work out of rustic field stations, focus on fieldwork, visit cultural sites, and interact with local scientists.

Directors: Clint Cowan, Professor of Geology; and Sarah Titus, Associate Professor of Geology

## Courses:

GEOL 285 Geology of the North Island, 6 credits
GEOL 286 Topics in North Island Geology, 3 credits, S/CR/NC
GEOL 287 Geology of the South Island, 6 credits
GEOL 288 Topics in South Island Geology, 3 credits, S/CR/NC

## Sport and Globalization in London and Seville, a Physical Education, Athletics, and Recreation Seminar, winter term, 18 credits

The program studies global sport, specifically, soccer, its place in culture, history, politics, and economics, as well as the mechanics of the sport. Along with classroom activities, site visits to soccer clubs, schools, and stadiums, the program encourages students to explore first hand British and Spanish culture. The program includes a service-leaning project in Seville where students will coach and teach local school children.

Director: Bob Carlson, Assistant Professor of Physical Education, Athletics and Recreation
Courses:
PE 290 Directed Reading and Volunteer Coaching Project, 2 credits, S/Cr/NC
PE 338 Global Athletics, 6 credits
PE 340 Introductory Coaching practicum, 4 credits,

## PE 174 Introductory Coaching Activity

POSC 238 Globalization and Development: Lessons from International Football, 6 credits

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

The program makes extensive use of local resources, both in Paris and in Morocco, 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: Dana Strand, Professor of French

## Courses:

FREN 249/349 Identity Crossings: France - Morocco, 6 credits
Students select two of the following courses:
FREN 208 Cultural Themes, 6 credits
FREN 246 Modern French Art, 6 credits
FREN 248 Representations of Islam in France, 6 credits

## Society, Culture, and Language in Peru, spring term, 18 credits

Based in Lima, Peru's capital, students will observe the differing sides and the contradictions and paradoxes of modernization in the developing world. The program's primary objective is to create conditions for the students to reflect on such reality and the cultural artifacts created by the peoples of Peru.

Director: José Cerna Bazán, Professor of Spanish

## Courses:

SPAN 211 Writing and Conversation, 6 credits
SPAN 269 Diversity, Conflict, and Culture, 6 credits
LTAM 365 Development and Social Inclusion in Peru, 6 credits
Moscow and Beyond: Russian Language and Culture Studies in Moscow, spring term, 18 credits
Seminar (whose courses count toward the Russian major and the Certificate of Advanced Study) will include Russian language courses, which meet from six to nine periods a week and are conducted by members of Philological Faculty of Moscow State University. Field trips might include trips to St.
Petersburg, Lake Baikal, the Republic of Buryatia, on the border with Mongolia.
Director: Diane Nemec Ignashev, Professor of Russian

## Courses:

RUSS 290 Reading for Russia, 3 credits

RUSS 226 Russia's Hallowed Places, 6 credits
RUSS 307 Advanced Grammar, 4 credits
RUSS 308 Advanced Phonetics and Intonation, 2 credits
RUSS 309 Advanced Composition, 3 credits
or
RUSS 207 Intermediate Grammar, 4 credits
RUSS 208 Intermediate Phonetics, 2 credits
RUSS 209 Intermediate Conversation, 3 credits
or
RUSS 107 Beginning Grammar, 4 credits
RUSS 108 Beginning Phonetics, 2 credits
RUSS 109 Beginning Conversation, 3 credits

## Japanese Linguistics in Kyoto, Japan, spring term, 18 credits

The program takes advantage of its location near Doshisha University to explore various aspects of Japanese history and culture as well as explore topics in linguistics. Knowledge of Japanese is not required.

Director: Michael Flynn, Professor of Linguistics

## Courses:

ASST 284 History and Culture of Japan, 6 credits
LING 285 The Linguistics of the Japanese Writing System, 6 credits
LING 286 The Structure of Japanese, 6 credits

## Urban History in Beijing and Beyond, spring term, 18 credits

The main objective of this seminar is to help the participants, informed by relevant historical sources and urban theories, reconstruct a visible face of urban change over time. The evolving meaning of the complex relations between national identities and the sites and structures of select East Asian cities will be explored, including Beijing, Shanghai, Seoul, among others. Students will have the opportunity to design and carry out an independent on-site research project based on a mixture of written sources, visual representations of a city, and interviews.

Director: Seungjoo Yoon, Associate Professor of History

## Courses:

HIST 158 City Planning and Daily Life in China and Korea, 6 credits

HIST 257 History of Urban China and Korea, 6 credits
HIST 290 Directed Reading: Approaches to Chinese Cities, 2 credits, $\mathrm{S} / \mathrm{Cr} / \mathrm{NC}$
HIST 295 Individual Research: Mapping Chinese and Korean Cities in Time, 4 credits

## Identity and Belonging in the New Europe, spring term, 18 credits

The program invites students to think about the nature of what it means to belong to a political community in the contest of contemporary Europe. It begins in the United Kingdom, using Edinburgh as its base. For the second half of the program the group relocates to Budapest. During the program the students will design and carry out a project involving a combination of field research techniques in comparative politics, including elite interviews, archival research, and quantitative data analysis.

## Director: Devashree Gupta, Associate Professor of Political Science

## Courses:

POSC 247 Comparative Nationalism, 6 credits
POSC 383 Politics of The European Union, 6 credits
POSC 392 Comparative Field Research Methods, 6 credits
Carleton offers one winter break program and one spring break program in 2013-2014. For the winter break program 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. For the spring break program students register for a winter term course, spend spring break on site, and return to campus spring term for a follow-up course. These programs are made possible by the Peter G. Thurnauer Memorial Programs Fund and the West Fund.

Comparative Agroecology in the U.S. and China, winter break 2013
The goal of the program is to explore the possibilities of sustainable agriculture in the U.S. and China. Fall term is spent on campus, meeting and talking with organic farmers, while during the winter break the students travel to China to meet with Chinese farmers. During the two-week China field investigation students perform extensive field experiments planned during fall term and will present their findings during winter term.

Director: David Hougen-Eitzman, Senior Lecturer in Biology
Students must register for both courses
Fall term: ENTS 260 Comparative Agroecology, 6 credits,
Winter break field work and winter term course: ENTS 261 Field Investigation in Comparative Agroecology, 6 credits

Wilderness Studies at the Grand Canyon, spring break 2014
This program explores the central issues and questions on how the Grand Canyon and other treasured places have reflected and shaped American cultural, political, and environmental history of the last four centuries. The winter break field trip and spring term course focus on the study of wilderness in

American society and culture. The course culminates at Carleton with the completion and presentation of a major research project.

## Director: George Vrtis, Assistant Professor of Environmental Studies and History

Courses:
Winter term: HIST 306 American Wilderness, 6 credits
Winter break field work and winter term course: HIST 307 Wilderness Field Studies, Grand Canyon, 6 credits

Program 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.

Associated 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, internships, community immersion activities, and field research are used throughout the programs, which are open to all majors. Individual program brochures are available in the Off-Campus Studies office, Leighton 119.

## Agriculture and Justice: Building a Sustainable Food System, Minneapolis/St. Paul and rural

 Minnesota. Spring semester onlyArt for Social Change: Intersections of Art, Identity, and Advocacy (formerly City Arts), Minneapolis and St. Paul. Spring semester only

Community Internships in Latin America (CILA) in Quito, Ecuador. Fall or spring semester
Democracy and Social Change in Northern Ireland. Spring semester only
Environmental Sustainability: Science, Politics and Public Policy, and Community Action, Minnesota. Fall semester only

Inequality in America: Policy, Community, and the Politics of Empowerment (formerly the Metro Urban Studies Term/MUST), Minneapolis and St. Paul. Fall or spring semester

Making Media, Making Change: Digital Technologies, Story Telling, and Activism, Minneapolis and St. Paul. Spring semester only

New Zealand Culture and the Environment: A Shared Future, New Zealand. Fall semester only
The New Norway: Globalization, National Identity, and the Politics of Belonging (formerly
Scandinavian Urban Studies Term/SUST), Oslo, Norway. Fall semester only
Writing for Social Change: The Personal, the Political, and the Power of the Written Word, Minneapolis and St. Paul, Minnesota. 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, 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 (ACM)

Thirteen programs in the United States and abroad are sponsored by the 14 consortium members of the ACM. A resident director for each program is recurited 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 Off-Campus Studies office and applications are available on line.

ACM Botswana University Immersion in Southern Africa, spring semester, adviser: Bereket Haileab

ACM Brazil Exchange. Fall or spring semester, adviser: George Vrtis
ACM Chicago Program: Arts, Entrepreneurship, and Urban Studies, Chicago. Fall or spring semester, or spring trimester (March-May), adviser: Adrienne Falcón. Nathan Grawe and David Lefkowitz

ACM Studies Costa Rica Language, Society, and the Environment. Fall semester only, adviser: Yansi Perez

ACM Costa Rica Field Research in the Environment, Social Sciences and the Humanities. Spring semester or spring quarter/trimester (April-June), adviser: Yansi Perez

ACM Florence Arts, Humanities, and Culture, Italy. Fall semester or winter quarter/trimester (January-March), adviser: Alison Kettering

ACM London and Florence Arts in Context, Italy and England. Spring semester \& winter quarter/trimester (Jan-March), adviser: Alison Kettering

ACM India Culture, Traditions, and Globalization. Fall semester, adviser: Amna Khalid
ACM Japan Study. Academic year, fall semester, fall semester with cultural practicum, \& spring semester, adviser: Noboru Tomonari

ACM Jordan Middle East and Arabic Language Studies. Fall semester, adviser: Adeeb Khalid

ACM Newberry Library Seminar Research in the Humanities, 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: Cindy Blaha

ACM Tanzania Ecology and Human Origins. August - December semester, adviser: Bereket Haileab

## ACM Urban Education: Student Teaching in Chicago. Fall or spring semester, adviser: Deborah Appleman

## 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, which includes the programs co-sponsored by Carleton, 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: Each year, many Carleton graduates and alumni continue their education in a variety of professional and graduate schools. Carleton does not provide a set curriculum for professional/graduate school preparation, and does not offer pre-professional (i.e. pre-law, premed) majors. Instead, a regular program of studies in one of the established major fields is recommended as the best preparation for further training. In consultation with their faculty advisers, department chair, and other academic and career advisers, students can arrange a program of study which best suits their own needs and objectives.

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 other exploratory opportunities and information.

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: Many Carleton grads obtain careers in the management of business firms, government agencies, and nonprofit enterprises. Potential employers as well as graduate schools of business urge students to take courses in economics, mathematics, computer programming and statistics. Interested students can discuss careers in these fields with the chair or any member of the economics department, as well as with advisers in the Career Center.

CHEMISTRY: The American Chemical Society Certified Chemistry Major. The American Chemical Society (ACS) is a professional society for chemists that has provided guidelines to baccalaureate institutions on best practices for teaching chemistry to undergraduate students. An ACS certified chemistry major requires more advanced study within the chemistry department. Students interested in continuing in chemistry after graduation in either graduate school or industry should consider the guidelines of the ACS certified chemistry major when planning their studies. More detailed information can be found at https://apps.carleton.edu/curricular/chem/chemciriculum/

EDUCATION: Preparation for Careers in Public Education: The Carleton licensure program is accredited by the Minnesota Board of Teaching and is in full compliance with federal Title II [http://www.ed.gov/about/reports/annual/teachprep/index.html](http://www.ed.gov/about/reports/annual/teachprep/index.html) regulations for disclosure of statemandated Praxis examination pass rates. For 2007-2008, the most recent year for which data are available, the Carleton licensure candidate pass rates were $100 \%$ for all areas. A detailed disclosure statement can be found here < https://apps.carleton.edu/curricular/educ/assets/CarletonTitleII.pdf> .

## ENGINEERING:

Carleton provides options for a 3-2 Engineering Program, also called the Combined Plan Program or Dual-Degree Program. The 3-2 program allows students to spend three years at Carleton and two years at an engineering school receiving dual degrees, a B.A. from Carleton and a B.S. in engineering from a partner engineering institution. We currently have formal partnerships with Columbia University and Washington University, which also offer a 4-2 version of the program.

More detailed information about the program can be found at https://apps.carleton.edu/curricular/physics/for_students/department_links/engineering/

LAW: The best pre-law education is a rigorous liberal arts education. You won't find a "pre-law" major at Carleton. In fact, most law schools discourage such programs. Any Carleton major can be a great background for someone considering a career in law. There are no specific courses you need to take to prepare for law school, but your schedule should include as many courses as possible requiring writing, oral analysis, research, and significant quantitative work. To help you prepare for the types of logic problems that occur on the LSAT and in law school courses, PHIL 210 (Logic), may be helpful.

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. Application should be made early in the junior year.

Any student interested in pursuing a career in law, should meet with Carleton's pre-law adviser, Mike Hendel (Career Center)

LIBRARY AND INFORMATION SCIENCE: People with degrees in library and/or information science are employed in a wide range of settings, including academic, public, school and specialized libraries, archives, historical societies, and museums, as well as in business of government, and information technology. A master's degree from a school of library and information science accredited by the American Library Association is the credential usually needed by those planning a career in librarianship or related fields.

Any undergraduate major is acceptable for those planning to go to library school; however there is a particular demand for people with science and social science backgrounds. Course work and practical experience in organizing, retrieving, manipulating, and presenting information are highly valued, as is
teaching and working directly with information seekers. Students with an interest in librarianship or related fields can gain practical experience through a wide variety of student jobs in the College library and Archives. Carleton's librarians and archivists are always eager to talk with students about work in library and information management settings. Contact the College Librarian for a referral to a local librarian or other information professional.

HEALTHCARE: Students interested in pursuing careers in healthcare fields (medicine, dentistry, veterinary medicine, public health, physical therapy and nursing, for example) should discuss their plans and questions with Pam Middleton, pre-med adviser during their first year at Carleton. Most students who plan to enter schools of allopathic or osteopathic medicine major in a science, but a major in any field is acceptable providing certain basic science courses are included. For detailed information, see the pre-med website at http://apps.carleton.edu/curricular/premed/

## 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 for admission should go online to go.Carleton.edu/admissions. Each applicant is responsible for providing the admissions office with all items requested. Students apply online via the Common Application website, at https://www.commonapp.org or online at Carleton's website at go.carleton.edu/apply.

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 Materials Must Be Postmarked by: | Complet Testing by: | File CSS <br> Financial Aid <br> PROFILE <br> Application by: | Mailing of Admissions Decisions On or Before: | Applicant's <br> Reply Date |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EARLY DECISION (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 will consider 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 degreeseeking student without violating the terms of their deferral.

Candidates who wish to defer college for a year (a gap 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 a gap year, 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 ACT. 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 a CD, DVD, weblinks or other evidence of their work with their application. Once a student has applied to Carleton, they will receive a link and password to their own application status page. They can submit supplementary material on their application status page at go.Carleton.edu/appstatus.

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 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. Information on campus visits is detailed at our website go.Carleton.edu/visits. 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 admissions 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.

## 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 Carleton Student Association (CSA) activity fee. For 2013-2014 the comprehensive fee totals $\$ 58,149$ and it is allocated as follows:

Tuition .\$45,900

Room ..................................\$6,279
Board \$5,703

CSA Activity Fee .................. $\$ 267$
Special Fees: The department of music offers private lessons in applied music. The fees for 2013-2014 per term for individual instruction in all instruments, and use of practice facilities are: after the drop/add deadline, a term fee of $\$ 275$ is billed to each student for weekly (normally 9 ) half-hour lessons ( 1 credit) per term, or $\$ 550$ for weekly (normally 9 ) hour lessons ( 2 credits). Class Guitar and African Drum Class are $\$ 78$ each. Junior and senior music majors receive up to 4 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 Student Financial Services Office.

Many art classes and various other classes require consumable materials and supplies which are not included in the comprehensive fee; special fees may apply to these classes. 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 is charged on the same basis.

Starting with winter term 2014, students participating in non-Carleton off-campus programs will be assessed a $\$ 500$ administrative fee. The fee will be charged to the student's Carleton student account after the Off-Campus Studies Petition has been approved.

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 total becomes a continuing enrollment deposit for subsequent years and the remaining $\$ 50$ of the deposit is used as a lifetime transcript fee, where students may request college transcripts from the Registrar without cost. The deposit ( $\$ 250$ ) will be returned upon graduation. Any unpaid student account obligation will be applied against this deposit at the time of graduation.

## Calendar of Payments:

When filing for admission (application fee, only applies to paper applications) \$30
When accepted (enrollment deposit) \$300
August $15 \quad \$ 19,383$
December 15 \$19,383
March $15 \quad \$ 19,383$
Total
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.

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 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.

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 the unpaid balance. An $8 \%$ per annum charge will be made on postponed accounts.

College policies on deposits and refunds apply to Carleton off-campus study seminars; in addition, a $\$ 500$ penalty is assessed for late withdrawals before the start of the program. See the Carleton College Off-Campus Study Agreement Form and Policy on Withdrawal.

Students who withdraw from a non-Carleton program are responsible for informing the program provider and abiding by their withdrawal policies.

Refunds: Students will be eligible for a refund of tuition, room, board and student activity fees if they have paid for the upcoming term and then decide to withdraw or take a leave of absence and they notify the Dean of Students before the term starts.

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 2013
September 27, 2013
Winter $2014 \quad$ January 17, 2014
Spring $2014 \quad$ April 11, 2014
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
Fall $2013 \quad$ October 17, 2013
Winter $2014 \quad$ February 6, 2014
Spring $2014 \quad$ May 1, 2014
Room charges will not be refunded if a student leaves after the term starts.
Board charges will be refunded for the remaining weeks of the term.
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 their student account 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 Carleton College Off-Campus Study Agreement Form and Policy on Withdrawal.

## 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 for all four years.

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 Area Directors and student Resident Assistants (RA's) 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 multiple 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 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 Carleton grants/scholarships, student employment, and student 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 (student 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 Carleton grants/scholarships 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 student 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 first-choice 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, or brass instruments. Auditions are required and the scholarship is worth a minimum of $\$ 2,000$ per year, plus approved music lessons. Bailey scholars are eligible to apply for a summer of music study at a national or international music institute.

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/scholarships and does not need to be repaid. The selfhelp 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 before the established deadline.

The majority of gift aid that Carleton distributes includes the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (SEOG), Minnesota State Grant, and Carleton grants/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 needbased 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, and 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 non-profit 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, Federal Direct Stafford Loans (subsidized and unsubsidized) and Federal Direct 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 August 15. 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 additional information or an application for the TuitionPay Plan, should visit https://tuitionpay.salliemae.com or call 800-635-0120, or contact the Carleton Business Office 507-222-4179 or businessoffice @carleton.edu.

## 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 SCHOLARSHIP 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.An ANONYMOUS SCHOLARSHIP was established in 2010 to ensure that all students of academic merit have access to a Carleton education.

An ANONYMOUS SCHOLARSHIP was established in 2010 to provide need-based financial aid to deserving students.

An ANONYMOUS SCHOLARSHIP was established in 2011 to provide assistance to students with financial need, with a preference for first generation students.

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 students with financial need.

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 WILLIAM BENTON SCHOLARSHIP FUND was established in 1976 by Dr. Evelyn Anderson Haymaker, Class of 1921, in memory of Senator William Benton, former Carleton trustee.

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 Charles D. Boyles, husband of Elizabeth, 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 longtime 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 taking music lessons, preferably students of stringed instruments, piano or voice, or for the purchase of music.

THE ARNOLD W. CARLSON '52 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 on the 50th anniversary of their graduation from Carleton.

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.

THE CLASS OF 1945 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. The scholarship fund supports two scholarships, one for a junior and one for a senior student, in the hope that their education will have some impact on the world's search for peace.

THE CLASS OF 1947 LAURENCE MCKINLEY GOULD SCHOLARSHIP FUND was established by gifts from members of the class on the $50^{\text {th }}$ anniversary of their graduation from Carleton.

In appreciation for their generous 50th Reunion gift, the College established THE CLASS OF 1950 SCHOLARSHIP. The scholarship is awarded to junior or senior Carleton students with financial need. They are known as Class of 1950 Scholars.

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 CLASS OF 1958 SCHOLARSHIP FUND was established by gifts from members of the class on the $50^{\text {th }}$ anniversary of their graduation from Carleton.

THE CLASS OF 1959 ENDOWED SCHOLARSHIP was established by gifts from members of the class on the occasion of their $50^{\text {th }}$ reunion. In establishing this scholarship, the Class of 1959 affirms one of the College's highest aspirations, which is to make an exceptional undergraduate liberal arts education accessible to students of all economic backgrounds.

THE '62 SCHOLARS FUND was established by gifts from members of the class at its 25th 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 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 BARBARA MCCAMUS CONDER MEMORIAL SCHOLARSHIP was established in 2013 with a gift from the estate of Barbara Conder, an English professor at Carleton from 1964-1969. The fund supports students pursuing studies in English literature.

THE HOWARD CONN FUND was established anonymously in 1960 to honor the Reverend Dr. Howard Conn, a Carleton trustee from 1948 to 1972, to support students with financial need with preference given to those preparing for missionary work.

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 FINANCIAL AID FOR INTERNATIONAL STUDENTS SCHOLARSHIP was established in 2007 through a bequest from the estate of Frederick W. Flott ' 43.

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.

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 RUTH HARTZELL GAUMNITZ FUND was established in 1937 by her husband, Carl Gaumnitz, in her memory.

THE CHARLES GEYER FUND was established by Charles Geyer in 1950.
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 GREEN FAMILY SCHOLARSHIP was established in 2013 with gifts from the estate of Mary Scott Green '35.

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 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 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 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 OFFCAMPUS 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 AND BARBARA JENKINS HONORARY SCHOLARSHIP was established in 1997 by alumni, family, and friends to honor and carry on the tradition of Professor Jenkins, the cherished mentor and inspiration to generations of Carleton students. In 2008 the scholarship was modified to recognize Barbara Jenkins and her significant contributions to Carleton upon her retirement. The fund provides financial assistance for English majors with high academic achievement.

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 created by the Joyce Foundation of Chicago in 1983 to assist minority students with financial need.

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 ROBERT H. KARATZ SCHOLARSHIP was established in 2012 by Robert H. Karatz ' 42 to assist students engaged in programs directly related to public speaking.

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 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 SCOTT S. LEVIN ' 72 SCHOLARSHIP FUND was established in 1972 in memory of Scott Levin by his family and friends. Scott passed away while a student at Carleton.

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 WARD B. AND SUSAN E. LEWIS SCHOLARSHIP was established in 2010 with gifts from the estates of Ward and Susan Lewis, members of the Class of 1932 and 1934, respectively.

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 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 ANNE B. MAYER ENDOWED MUSIC SCHOLARSHIP FUND was established in 2006 with a gift from the estate of Professor Emerita Anne B. Mayer, a member of the Carleton music faculty for forty years.

THE PHILIP A. McADAM SCHOLARSHIP 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 ELLIS HUNTINGTON McCONNELL FUND was established in 1973 with a gift from the estate of Marion McConnell in honor of her son.

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 Mestiians' 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 BENJAMIN FRANKLIN MINER MUSIC SCHOLARSHIP was established in 1985 by Mr. and Mrs. T. W. Miner.

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 DAVID W. MUENOW '61 SCHOLARSHIP was established in 2013 with a gift from the estate of David W. Muenow '61 to assist students majoring in chemistry, physics/astronomy, or geology.

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 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.

THE J. FALCONER PATERSON AND KATHERINE K. PATERSON SCHOLARSHIP FUND was established in 1996 through a bequest from the Paterson's. 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 JENNIFER A. PIETENPOL SCHOLARSHIP was established in 2010 by Dr. Jennifer A. Pietenpol ' 86 to assist students with academic interests in the sciences.

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 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 ROGERS FAMILY SCHOLARSHIP was established in 2013 by James A. Rogers '66 P'13 and his wife, Ellen Rogers P'13.

THE KATHLEEN ROSSKOPF AND ROLAND PESCH SCHOLARSHIP was established in 2009 by Kathleen Rosskopf ' 72 and Roland Pesch who both benefited from scholarships during their college years.

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 longtime 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 FRANK SHIGEMURA SCHOLARSHIP was established in 1951 by Mr. and Mrs. T. Shigemura to honor the memory of their son, Frank, who was killed in World War II.

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 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 SOUTHWICK FAMILY SCHOLARSHIP was established in 2012 by the Southwick Family in memory of Susan Dreyer Southwick '58 to assist female students majoring in math, science, or music.

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 ELLA ANDERSON STERRIE '12 SCHOLARSHIP was established in 2013 by Mrs. Eloise S. Cadman '49 and Dr. Norman L. Cadman in memory of Ella Anderson Sterrie, Class of 1912.

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 CHARLES H. STUEBE ENDOWED SCHOLARSHIP was established in 1997 with a gift from Charles H. Stuebe ' 43 to provide financial assistance to students of color. Additional gifts were received from Mr. Stuebe's estate following his death in 2008.

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 ANNA AND THEODORE THORSEN SCHOLARHSIP was established in 2010 through a bequest from Helen Blomquist ' 37 in honor of her parents.

## 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 AXEL E. VESTLING MEMORIAL SCHOLARSHIP was established in 1945 in memory of Professor Vestling by his former students and friends. Professor Vestling served the College for 28 years.

THE PETER VIKE MEMORIAL SCHOLARSHIP was established in 1967 by the mother of Peter Vike '53 in his memory. Peter was killed in a plane crash in 1963.

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 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 JOHN D. BOYD '63 MEMORIAL SCHOLARSHIP was established in 2012 by Anne Williams in memory of her husband, John. This scholarship is intended to assist students majoring in English.

THE CARLETON-NEBRASKA CONNECTIONS SCHOLARSHIP was established in 2010 through a grant from the Robert B. Daugherty Charitable Foundation to provide educational opportunities for Nebraska students who would not readily seek out a highly selective, national, small liberal arts college; and to provide them with the support mechanisms necessary for their success.

THE CLASS OF 1983 GEOLOGY SCHOLARSHIP was established in 2013 by Robert J. Alexander '83 and Don J. Frost Jr. '83 with additional contributions from several geology majors from the Class of 1983 on the occasion of their 30th reunion. The fund will support geology majors.

THE PETRA CROSBY INTERNATIONAL SCHOLARSHIP was created in 2010 by alumni, colleagues and friends of Petra Crosby to honor her service to international students at Carleton College and to carry on her commitment to seeing that every talented international student who wants a Carleton education will have the resources to make that dream come true.

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 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 HERB '73 AND BARBARA FRITCH SCHOLARS PROGRAM was established in 2012 by Herb and Barbara Fritch to assist middle class students from rural and nonmetropolitan areas of the country.

THE GEORGE INTERNATIONAL FELLOWS FUND was established in 1999 by the George Family Foundation. Preference for awards is given to students from developing nations who demonstrate economic need and exceptional academic potential and promise.

THE GRADUATION CELEBRATION SCHOLARSHIP was established in 2013 by Barbara Levine in honor of her granddaughter, Becca Greenstein '13, on the occasion of her graduation from Carleton.

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.

THE ERIC LASLEY'66 SCHOLARSHIP FOR PHYSICAL AND MATHEMATICAL
SCIENCES was established in 2010 by Eric Lasley to provide financial support to junior or senior 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 LEDYARD-HARLOW ENVIRONMENTAL STUDIES SCHOLARSHIP was established in 2013 by Dinah Harlow P'80 P'87 to assist students majoring in environmental studies.

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.

THE CARL D. WEINER AND PAUL D. WELLSTONE SCHOLARSHIP was established in 2013 by Eric M. Robinson ' 88 and his wife, Lisa, on the occasion of Eric's $25^{\text {th }}$ reunion. The fund assists students who have engaged in a notable manner both inside and outside of the classroom.

## 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 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 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, 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 CHARLES CARLIN PRIZE IN CHEMISTRY was established in 2011 by Charles H. Carlin, Charles "Jim" and Marjorie Kade Professor of the Sciences, Emeritus. The prize honors senior chemistry majors whose enjoyment of chemistry and gracious good humor has inspired and assisted others in the field.

THE MIKE CASPER AWARD was established in 2011 by the environmental studies (ENTS) program to honor the memory of Barry M. "Mike" Casper, professor of physics from 1966 to 2003 and long-time cornerstone of the environmental studies program at Carleton. This prize honors the graduating ENTS majors who best personify Professor Casper's commitment to superior academic achievement and his energy and leadership in support of understanding and protecting the environment.

THE CLASS OF 1885 PRIZE is awarded annually to the student submitting the best work of imagination in prose.

## THE CLASS OF 1960 DEVELOPING CIVIC LEADERS IN NONPROFITS INTERNSHIP <br> FUND was established by the class in celebration of their $50^{\text {th }}$ reunion. This fund provides a stipend for students to pursue unpaid or low-paying summer internships with non-profit organizations.

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 CLASS OF $196350^{\text {th }}$ REUNION FUND FOR INTERNSHIPS was established with gifts from members of the Class of 1963 on the $50^{\text {th }}$ anniversary of their graduation from Carleton. The fund supports student internships through the Career Center.

THE CLASS OF 1966 DIVERSITY OF ACHIEVEMENT AWARD was established by gifts from members of the class on the 25th anniversary of their graduation from Carleton. The award honors 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 CREATING REWARDING EDUCATIONAL DEVELOPMENT OPPORTUNITIES (CREDO) FUND was established in 2006 by Laura Clise ' 01 to facilitate learning and development opportunities for students to pursue unpaid internships or research fellowships.

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 DAVID C. DONELSON '77 FUND was established in 2013 with a gift from Charles Millard to support students who wish to broaden their intellectual, cultural, or creative horizons through a special project, trip, or initiative.

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 JAMES FINHOLT PRIZE IN INORGANIC CHEMISTRY was established in 2001 by friends and colleagues in honor of the 42 years of service of Professor James E. Finholt to the Department of Chemistry at Carleton. The prize is awarded to graduating seniors who excelled in the study of inorganic chemistry and who share the type of enthusiasm and love of the molecular world exhibited by Professor Finholt.

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 long-standing 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
was 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 MERRILL E. JARCHOW AWARD 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 KELLEY INTERNATIONAL FELLOWSHIP 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 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 LIPTON FAMILY CAREER EXPLORATION INTERNSHIP was established in 2008 by James and Jill Lipton, parents of Gordon B. Lipton '06. This fund supports externships and other career exploration opportunities, especially those in the Washington, D.C. metropolitan area.

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 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 PRIZE 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 SCHOLARS 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 "TED" MULLIN MEMORIAL FELLOWSHIP IN HISTORY 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 MULTICULTURAL ALUMNI NETWORK (MCAN) SCHOLARS PROGRAM supports internships, research experiences, or field-based opportunities that offer either no compensation or compensation lower than the pro-rated equivalent of entry-level salary. Grants are competitively awarded to sophomore and junior students of color to use during the summer break.

## THE RICHARD T. NEWMAN FAMILY FUND FOR LANGUAGE STUDY INTERNSHIPS

 ABROAD 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, 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 FUND 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 FIRST AND SECOND YEAR 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 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 RACHEL ROSENFELD PRIZE FOR EXCELLENCE IN THE STUDY OF SOCIOLOGY AND ANTHROPOLOGY is awarded to the student submitting the most accomplished senior thesis in sociology and anthropology and honors the memory of Rachel A. Rosenfeld ' 70.

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 SALISBURY STUDENT FELLOWSHIP 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 offcampus which in other ways enriches and strengthens the institution and the lives of its members.

THE M. LEITH SHACKEL '29 INTERNSHIP 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 LEE SIGELMAN PRIZE was established in 2010 to honor the memory of Professor of Political Science Lee Sigelman '67. The prize recognizes the best paper written by a junior political science major.

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 PRIZE, 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 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 ROBERT E. WILL INTERNSHIP FUND IN SOCIAL ENTREPRENEURSHIP was

 established in 2013 with a gift from Eric and Marilyn Carlson, both members of the Class of 1966, to honor retired Carleton economics professor Bob Will '50 P' 82 P' 85 W' 70 . The fund assists with expenses associated with internships in the U.S. or countries that have developing, underdeveloped, or impoverished economies and that incorporate the principles of social entrepreneurship as part of the internship's focus.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 SAM '75 AND MEG WOODSIDE ENDOWED FUND FOR CAREER EXPLORATION

 was established in 2008 to deepen the awareness of students of career possibilities and to expand postgraduate options for students. The Fund supports internships and other career exploration opportunities in domestic governmental or non-profit organizations.THE LAURENCE AND LUCILLE WU FAMILY ENDOWED FUND 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.

## Alumni

https://apps.Carleton.edu/alumni/council/association

