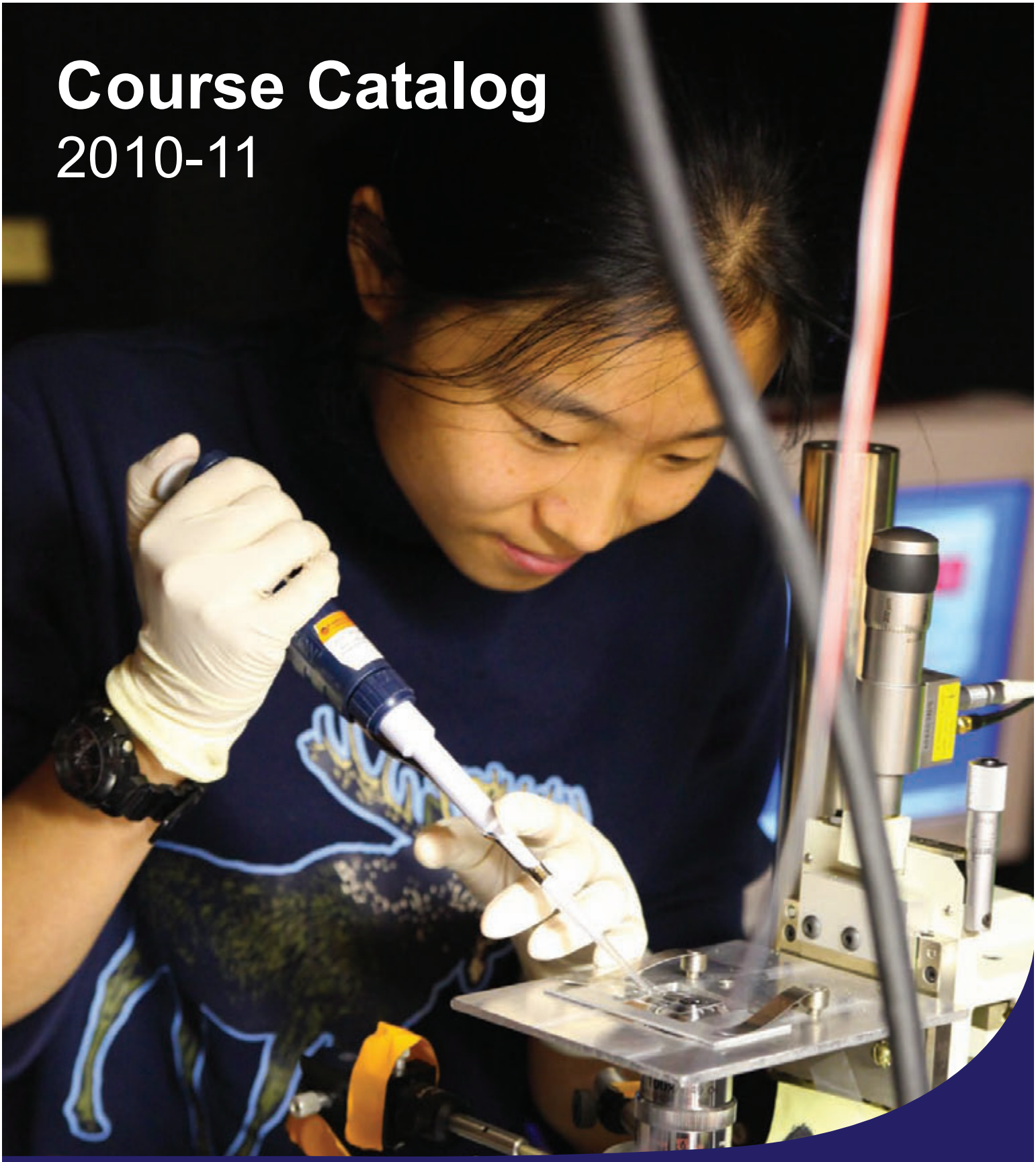
Course Catalog
2010-11



LAWRENCE UNIVERSITY
APPLETON, WISCONSIN

CONTENTS

About Lawrence **7**
Mission 7
Educational philosophy 7
Lawrence in the community 7
History 8
Presidents of the college 10

A Liberal Arts Education **11**
Liberal learning 11
A Lawrence education 12
A residential education 12

The Campus Community **13**
Academic and campus life services 13
The campus and campus life 13

Planning an Academic Program **21**
The structure of the curriculum 21
Postgraduate considerations 25

Degree and General Education Requirements **28**
Residence requirements 28
Bachelor of Arts degree 28
Bachelor of Music degree 30
B.A. and B.Mus. double-degree program 31
Cooperative degree programs 34
Engineering 34
Forestry and environmental studies 34
Occupational therapy 35

Courses of Study **36**
Anthropology 36
Archaeology (see Anthropology)
Art and Art History 48
Studio Art 48
Art History 56
Biochemistry 64
Biology 70
Biomedical Ethics 83
Business (see postgraduate considerations)
Chemistry 86
Chinese and Japanese 96
Classics 103
Cognitive Science 113
Computer Science 118
East Asian Studies 124
Economics 131
Education 143
English 152
Environmental Studies 165
Ethnic Studies 181

CONTENTS

Film Studies 192
French and Francophone Studies 200
Freshman Studies 210
Gender Studies 212
Geology 222
German 232
Government 244
History 256
International Studies 276
Japanese (see Chinese and Japanese)
Latin American Studies 278
Law (see postgraduate considerations)
Linguistics 283
Mathematics 291
Medicine (see postgraduate considerations)
Music 301
Interdisciplinary Major in the Natural Sciences 304
Neuroscience 305
Philosophy 311
Physics 319
Political Science (see Government)
Psychology 329
Religious Studies 342
Russian 348
Sociology (see Anthropology, Gender Studies)
Spanish 355
Statistics (see Economics, Mathematics)
Theatre Arts 365
University Courses 377

Conservatory of Music 383
General information 384
Residence requirements 384
Bachelor of Music degree 384
Major in performance 387
Emphasis options for performance major 390
Major in music education 393
Major in theory/composition 397
Emphasis option for theory/composition majors 398
Five-year B.A. and B.Mus. double-degree program 400
Courses 403
Composition and arranging 403
Ensemble performance study 406
Music education and pedagogy 411
Music history 419
Applied music individual instruction 427
Music repertoire and performance studies 429
Music theory 435

CONTENTS

Student-Initiated Courses and Programs 442
Directed Study 442
Tutorials 442
Independent study 442
Academic internships 443
Honors projects 444
Writing for credit 449
Student-designed courses 449
Student-designed majors 450

Learning Experiences Outside the Classroom 452
Student programs at Björklunden 452
Speakers and other campus visitors 453
The Career Center and internships 455
ArtsBridge America 456

Off-Campus Programs 457

Lawrence-sponsored off-campus programs 460
Lawrence London Centre 460
Lawrence Francophone seminar 461
Lawrence Kurgan exchange term 461
London Centre Courses 462

Affiliated programs in the United States 466
Chicago
ACM Business, Entrepreneurship and Society 466
Chicago Arts Program 466
Newberry Seminar in the Humanities 466
TeachChicago! Urban Teaching Program 467
Urban Studies 467
Oak Ridge, Tennessee
Oak Ridge science semester 467
Superior National Forest, Minnesota
Coe College Wilderness Field Station 467
Washington, D.C.
Washington Semester 468
Woods Hole, Massachusetts
SEA semester –Ocean exploration 468
Semester in environmental science 468

Affiliated programs in other countries 469
Argentina
Buenos Aires 469
Australia
Melbourne 469
Sydney 469
Austria
Vienna 470
Botswana
Botswana 470

CONTENTS

Canada
Québec Seminar & Internship 470
Chile
Santiago 470
China
Associated Colleges in China 471
Costa Rica
Field Research in Costa Rica 471
Latin American Culture & Society in Costa Rica 471
Sustainable Development Studies in Costa Rica 472
Ecuador
International Development in Ecuador 472
Quito 472
France
Nantes 473
Paris - French Studies Program 473
Germany
Berlin - Language & Area Studies program 473
European Union 473
Freiburg 474
Greece
College Year in Athens 474
Hungary
Budapest Semester in Mathematics 474
India
India Studies 474
Ireland
Gaiety School of Acting in Dublin 475
Italy
Arts in Context in London & Florence 475
Intercollegiate Center for Classical Studies 475
Italian Renaissance Studies in Florence 476
Milan 476
Rome 476
Japan
Japan Study 477
Tokyo - Society & Culture Program 477
Kenya
International Development in Kenya 477
Madagascar
SUNY Madagascar Semester 478
Mexico
Guanajuato 478
Netherlands
Amsterdam 478
Amsterdam School of Music 479
Gerrit Rietveld Academie 479
New Zealand
Auckland 479

CONTENTS

Russian Federation
Kurgan Exchange Program 461
Smolny College 480
Senegal
Francophone Seminar in Senegal 480
Spain
Grenada 480
Salamanca 481
Tanzania
Field Studies in Tanzania 481
United Kingdom
Arts in Context in London & Florence 481
London Centre 460
Northern Ireland: Democracy & Social Change 481
Oxford University 482
University of York 482

Academic Procedures and Regulations 483
Opportunities, obligations, and responsibilities 483
Academic advising 483
Honor code 484
Three-term system and course loads 485
Registration 486
Limited enrollment classes 487
Prerequisite checking 487
Withdrawing from courses 488
Class attendance 488
Final examinations 489
Academic accommodations for students with disabilities 489
Grading system 490
Academic progress 493
Transfer between degree programs within the university 493
Declaration of a major 494
Declaration of minors and interdisciplinary areas 494
Transfer credit 494
Credit for advanced placement examinations 495
Credit for International Baccalaureate program 496
Completion of the foreign language general education requirement 496
Leaves of absence and withdrawal 497
Dean's list 498
Conferring of degrees and graduation 498
Honors at graduation 499
Confidentiality of student education records 499
Petitions for exceptions to academic regulations 500
Grievance procedures 500

CONTENTS

Admission, Fees and Financial Aid 502
Admission to the university 502
Application deadlines and campus visits 502
Tuition, fees, and refunds 503
Admission and matriculation fees 503
Comprehensive fee 503
Incremental fees 504
Other fees and costs 504
Room and board 504
Bills and payments 505
Refunds 506
Financial aid 507

Awards, Societies and Fellowships 508
Awards and prizes 508
Academic honorary societies 510
Fellowships 510

Directory 513
Board of Trustees 513
Faculty 515
Emeriti faculty 533
Administrative offices and officers 536
2010-11 academic year calendar 540
2011-12 academic year calendar 541
Directions to Lawrence 542

Lawrence University does not discriminate on the basis of sex, race, color, national or ethnic origin, religion, sexual orientation, parental or marital status, age or disability in its programs and activities. Inquiries regarding the non-discrimination policy may be directed to the provost and dean of the faculty at 920-832-6528.

This catalog represents the most accurate information on Lawrence University at the time of its posting. The university reserves the right to make such alterations in its programs, regulations, fees and other policies as warranted.

About Lawrence

Mission
Lawrence University of Wisconsin, through its undergraduate residential college and Conservatory of Music, educates students in the liberal arts and sciences. The university is devoted to excellence and integrity in all of its activities and committed to the development of intellect and talent, the pursuit of knowledge and understanding, the cultivation of sound judgment and respect for the perspectives of others. Lawrence prepares students for lives of achievement, responsible and meaningful citizenship, lifelong learning and personal fulfillment. As a learning community of scholars and artists we engage each other in a transformative process that emphasizes individualized learning, supported by an environment of rich educational opportunities in a residential campus setting.

Educational Philosophy
Students enter Lawrence at a time when they are actively forging their identities and seeking their place in the world. A Lawrence education is therefore transformative: we strive to help each student develop as a liberally educated person who can think deeply and creatively about ideas, gather and analyze evidence, communicate effectively, articulate a personal identity that leads to thoughtful life choices and who is committed to responsible citizenship. This transformation is supported by a learning community that immerses students in the breadth of human experience, engages ideas in a spirit of open discourse, values the uniqueness of the individual and celebrates accomplishment. The foundation for this learning community is a vibrant, safe and healthful residential campus that contains talented and diverse groups of students, faculty, administrators and staff. Our residential experience is enhanced by opportunities to study abroad and to become involved in the wider community. The University values effective teaching combined with distinguished scholarship and creative activity.

We see in each student the potential to become an informed, independent thinker, and concerned, responsible citizen. Lawrence students can personalize their learning through interactions with peers, professors and staff in a wide variety of settings, both formal and informal. The process begins with our *Freshman Studies* program, and continues through the sophomore and junior years, and into our Senior Experience programs.

Lawrence in the Community
Lawrence is part of an intellectual and creative community that includes the Fox Valley, Lawrence's alumni and the larger global community. We are committed to providing service to and learning from the larger community. Through such resources as Björklunden and the Academy of Music, Lawrence contributes to the vitality of the surrounding community by: (1) making available programs of cultural enrichment, (2) drawing on the knowledge and experience of members of that community in the exploration of significant issues, (3) providing opportunities for alumni to maintain a lifelong connection with the institution and with each other and encouraging their continuing interest in learning, and (4) providing such educational programs as the certification as public school teachers in the state of Wisconsin.

About Lawrence

History

Lawrence, like the city of Appleton in which it is situated, owes its origins to the perseverance of frontier ministers and to the philanthropy of wealthy Bostonians. In 1847, prior to the statehood of Wisconsin, the first member of the Lawrence administration and Appleton's first permanent resident arrived on the scene in a dugout canoe and selected a wooded bluff above the Fox River as the site for the campus. The Rev. William Harkness Sampson had been commissioned, along with the Rev. Henry R. Colman, by the Boston merchant Amos A. Lawrence to establish a frontier school to afford "gratuitous advantage to Germans and Indians of both sexes." Lawrence pledged $10,000 to endow the school, on condition that the Methodists, represented by Sampson and Colman, match his gift. Even before the money could be raised, the Territorial Legislature, on January 15, 1847, granted a charter to Lawrence Institute, a name that was changed to Lawrence University when classes first began on November 12, 1849.

The Early Years

During its first 40 years Lawrence struggled with the problems of a developing frontier: the failure of wheat crops, the disruptions of the Civil War and the chaos of financial panics. Through it all, seven different college administrations held fast to the tenets of a strong classical education. The early curriculum, though constrictive by today's standards, was, on the whole, rather broad for the time, and the alumni of that era attained distinguished careers in education, business, the ministry, law and politics.

The return of Dr. Samuel Plantz to his alma mater as president in 1894 marked a turning point for Lawrence. During his 30-year administration, the student body grew from 200 to 800; the faculty increased from nine to 68; the endowment grew from less than $100,000 to $2,000,000; and the physical plant was enhanced by the construction of eight major buildings. During these years, Lawrence's pursuit of academic excellence was reflected in the selection of its first Rhodes Scholar in 1904 and the establishment of a Phi Beta Kappa chapter in 1914.

During Plantz's administration, the Conservatory of Music came into its own as a separate part of the university with the addition of six faculty members, the introduction of curricular offerings in public school music and music history and the acquisition of a building devoted exclusively to music instruction.

Lawrence College

In 1913, the institution adopted the name Lawrence College to underscore its commitment to undergraduate liberal education. That commitment received further articulation during the administration of President Henry Merritt Wriston (1925-37), when the college charted a course that it has followed faithfully to the present day. In the words of the catalog of 1934, "The ultimate purpose of liberal education at Lawrence is the establishment and improvement of standards — standards of thought and expression, of taste and interest, of character and ethics, of health and sane living."

While holding fast to these enduring goals of liberal education, Lawrence continually has reassessed and reshaped its academic program in response to the changing contours of knowledge and changing views on the nature of learning. The tutorial system, first instituted by President Wriston, has blossomed into a wide range of options for independent learning. Freshman Studies, introduced by President Nathan Marsh Pusey (1944-53), today remains a distinctive expression of the commitment of the entire Lawrence community to the examination of ideas of abiding importance.

About Lawrence

With the introduction of a number of overseas programs in the 1960s, Lawrence enhanced its ability to broaden the horizons of its students through direct contact with other societies. The recent appearance in the curriculum of interdisciplinary and cross-disciplinary offerings in biomedical ethics, cognitive science, East Asian Studies, Environmental Studies, Ethnic Studies and Gender Studies, among others, reflects a concern that new knowledge be available to Lawrence students along with the traditional courses in the arts and sciences.

Milwaukee-Downer College
Under the leadership of President Curtis W. Tarr (1963-69), Lawrence once again assumed the name Lawrence University, when it was consolidated in 1964 with Milwaukee-Downer College for Women. Milwaukee-Downer, named in honor of its trustee and benefactor, Jason Downer, was itself the product of a merger in 1895 between Milwaukee Female College and Downer College of Fox Lake. Both schools had pioneered in the education of women, and Milwaukee Female College had benefited early on from the interest of Catharine Beecher, a sister of Harriet Beecher Stowe, who provided the institution with an advanced program of high educational standards.

Today's Lawrence
The present campus, situated on 84 acres, contains 58 instructional, residential, recreational and administrative facilities. Björklunden vid Sjön, Lawrence's 425-acre northern seminar center, is located on Lake Michigan in Door County, Wisconsin.

The student body of 1,442 students, drawn from 46 states, the District of Columbia, the Virgin Islands and 51 foreign countries, is served by a full-time faculty of 155 men and women.

Lawrence is accredited as a degree-granting institution by the North Central Association of Colleges and Secondary Schools, and the Conservatory of Music is an accredited institutional member of the National Association of Schools of Music. Lawrence also is a member of the Midwest Conference and National Collegiate Athletic Association, Division III (NCAA III).

Lawrence today is what it has been for much of its history, an undergraduate college of the liberal arts and sciences with a Conservatory of Music. It honors the vision of its founders and builds on the heritage of more than a century and a half of excellence in undergraduate education.

About Lawrence

Presidents of Lawrence University

- 1849-1853 William Harkness Sampson, M.A. (principal of the institution)
- 1853-1859 Edward Cooke, D.D. (first president)
- 1859-1865 Russell Zelotes Mason, LL.D.
- 1865-1879 George McKendree Steele, D.D., LL.D.
- 1879-1883 Elias DeWitt Huntley, D.D., LL.D.
- 1883-1889 Bradford Paul Raymond, Ph.D., D.D., LL.D.
- 1889-1893 Charles Wesley Gallagher, D.D.
- 1893-1894 L. Wesley Underwood, M.S. (as acting president)
- 1894-1924 Samuel G. Plantz, Ph.D., D.D., LL.D.
- 1924-1925 Wilson Samuel Naylor, D.D., L.H.D. (as acting president)
- 1925-1937 Henry Merritt Wriston, Ph.D., LL.D.
- 1937-1943 Thomas Nichols Barrows, M.A., Litt.D., LL.D.
- 1943-1944 Ralph Jerome Watts, B.S., M.A. (as acting president)
- 1944-1953 Nathan Marsh Pusey, Ph.D., LL.D., L.H.D.
- 1954-1963 Douglas Maitland Knight, Ph.D., LL.D., Litt.D.
- 1963-1969 Curtis William Tarr, Ph.D.
- 1969-1979 Thomas S. Smith, Ph.D.
- 1979-2004 Richard Warch, B.D., Ph.D.
- 2004- Jill Beck, Ph.D.

A Liberal Arts Education

Liberal Learning
To participate in a liberal education is a privilege and a challenge; to be liberally educated is to be transformed. Open and free inquiry, a devotion to excellence, the development of character, the mastery of competencies, the ability to think critically, the excitement and rewards of learning — these are the aims and principles of a liberal arts education.

Liberal learning liberates, freeing us from the restraints of time and place, enabling us to grow, to change and to respond to the new, the unforeseen, the unexpected. To be liberally educated is to live imaginatively in worlds not our own and to examine values not of our making.

A liberal education tests our ability to investigate and understand the nature of an organism, the applications of a theorem, the behavior of a crowd, the principles of a political system, the meaning of a poem, the causes of an event, the consequences of an argument, or the composition of a symphony.

Liberal education promotes diversity, skepticism and debate. It views the world as changing, not fixed. It asks not only what, but why. It insists that we make judgments rather than have opinions; that we treat ideas seriously, not casually; that we be committed instead of indifferent.

Liberal education is vocational. It prepares us to assume positions of leadership and responsibility as wage-earners and citizens. To be liberally educated is not to be limited to a particular niche in the job market but to be freed and qualified for many opportunities. And, most important of all, it is to be equipped to assume new vocations and accept new challenges throughout life.

Students come to Lawrence with many career objectives and options — law, public service, health professions, business, service vocations, engineering, teaching, ministry. Liberal education is a prerequisite to all of these and more. Whether or not a student seeks professional or graduate training beyond the bachelor’s degree, liberal learning provides the skills, the talents, the critical intelligence and the range that offers access to many careers.

Above all, however, a liberal education is a function of choice and self-discipline. Lawrence provides opportunities; it does not prescribe decisions. The privilege of liberal learning is the freedom to choose; the challenge of liberal learning is to choose responsibly.

A Liberal Arts Education

A Lawrence Education
"Welcome to the company of educated men and women."

With these words, university presidents traditionally salute Bachelor of Arts recipients at Commencement. In the centuries since that greeting was first proclaimed, the definition of the educated man or woman has expanded. Two and one-half centuries ago, a college curriculum was relatively uniform and straightforward; the "liberal arts" numbered seven. Today, the curriculum is diverse and complex; the liberal arts find expression in many disciplines and departments, use a variety of methodologies and skills and are conveyed by courses numbering in the hundreds.

No one — neither student nor faculty member — can master all available disciplines and subject matters. When graduates are hailed among the company of educated men and women, each will have reached that state by selecting a program of courses unique to him or her.

"What one knows is, in youth, of little moment," wrote Henry Adams; "they know enough who know how to learn."

Lawrence does not pretend to certify that every graduate possesses a prescribed amount of knowledge. But the university does claim that the education students attain here marks them as persons who have developed the abilities to think critically, write clearly and speak effectively.

The route to liberal education lies in a course of study that combines both breadth and depth. The Lawrence curriculum promotes exposure to a wide range of subject matters and intellectual approaches. It also calls for the focused study of a single area of knowledge. Within this general framework, the student exercises wide latitude in building a course of study. A Lawrence education, then, results from considered choices. The college provides ample room for such choices and encourages students to exercise them boldly.

A Residential Education
Lawrence University is a residential college by design. Students are required to live on campus because we believe that a small residential community distinguished by frequent face-to-face interactions between and among its members provides an ideal environment for accomplishing the goals of liberal education.

Lawrence's residential nature maintains and expands the opportunities for meaningful interactions outside the classroom and, in so doing, contributes to the fulfillment of Lawrence's mission to promote among students "the development of intellect and talent, the pursuit of knowledge and understanding, the cultivation of sound judgment and respect for the perspectives of others." Furthermore, meaningful relationships between students and faculty, among students, and within the Lawrence community at large preserve and extend the vitality of the institution.

The Campus Community

Academic And Campus Life Services
The provost and dean of the faculty is the chief academic officer of the university. Among the responsibilities of the provost are the oversight of all academic programs; the hiring and evaluation of faculty; and the disbursement of funds for travel, research and curricular development.

The associate dean of faculty for student academic services oversees and assists the academic progress of Lawrence students. The associate dean assigns and supports faculty advisors, especially as questions arise concerning variations from traditional courses of study, academic progress and withdrawal from the college or conservatory. The associate dean of faculty for student academic services serves as advisor to the Honor Council.

The student academic services office also supervises academic support services, including the Center for Teaching and Learning, which provides help with writing, speaking, quantitative and study skills, as well as content tutoring in most courses offered by the university.

The vice president for student affairs and dean of students supervises extracurricular and residential programs, as well as career, international student, multicultural, health, counseling, security, dining and volunteer services. In addition, the dean is the advisor for the student Judicial Board and serves as the liaison with local authorities.

The campus life staff advises students about campus organizations and co-curricular activities; helps students identify campus and community resources to support their interests; assists student organizations with leadership training, membership development and program planning; and advises fraternities and sororities.

The campus life and housing department includes the residence hall directors, residence life advisors and residence life managers, who coordinate activities, oversee the general operation of the residence halls, serve as community leaders and help maintain a safe and comfortable living environment. The housing coordinator is responsible for the management of the housing selection process for returning students, as well as the matching of new Lawrentians with roommates and placing them in room assignments.

The Office of Multicultural Affairs promotes dialogue, understanding and respect among the many cultural and identity populations represented within the Lawrence community. The office supports a range of programs designed to develop and sustain cooperation and collaboration among students, faculty and staff. The staff serve as a resource for students from groups traditionally under-represented at Lawrence.

The Office of International Student Services supports the international student population through immigration-regulation advising and procedural assistance; cultural, financial and academic issues advising; and administration of university compliance with the Student and Exchange Visitor Information System (SEVIS). The coordinator of international student services is an advocate for Lawrence’s diverse international population and offers appropriate resources and services to meet student needs.

The residence life and housing department includes the residence hall directors, residence life advisors and residence life managers, who coordinate activities, oversee the general operation of the halls, serve as community leaders and help maintain a safe and comfortable living environment. The housing coordinator is responsible for the management of the housing-

selection process for returning students, as well as the matching of new Lawrentians with roommates and placing them in room assignments.

The Career Center provides individual career counseling to students and alumni, assists students with choosing a major and developing an internship and offers guidance with the application process for graduate and pre-professional programs. The Career Center maintains a library of print and on-line information on careers and graduate schools, hosts employers wishing to conduct on-campus interviews, collects and publicizes full-time and part-time employment opportunities and internships and assists students with career decision-making and job-search activities. The Career Center also offers self-assessment testing to assist students with career decisions.

Confidential health and counseling services are available to all students. Health Services is staffed by a nurse and physicians who can aid students with health concerns. Counseling Service staff members offer individual appointments, as well as outreach programs to support the psychological well-being of students and allow them to achieve their academic and personal goals. Drug and alcohol education and wellness programming are integral parts of this outreach.

The Campus And Campus Life

Main Hall

Main Hall, the building at the heart of the campus, is perhaps the most visible symbol of the Lawrence tradition. Constructed in 1853, it originally housed all of the college — classrooms, the laboratory, the library, administrative and faculty offices, a dining room, a chapel and even living quarters.

During the Civil War, Main Hall was rumored to have been a station on the Underground Railroad to Canada; in 1974, it was entered in the National Register of Historic Places of the U.S. Park Service.

It now houses classrooms and faculty offices for the humanities, along with the John G. Strange Student Commons, an advanced Humanities Computing Laboratory and the Hiram A. Jones Latin Library.

Youngchild Hall and Thomas A. Steitz Hall of Science

Stretching out south of Main Hall are other major classroom buildings, including Youngchild Hall of Science and Thomas A. Steitz Hall of Science.

Youngchild Hall, built in 1964 and fully renovated in 2000-01, houses the physics department, the geology department and part of the biology department.

Connected to Youngchild by a glass-enclosed atrium, the Thomas A. Steitz Hall of Science, dedicated in October 2000, provides space for the molecular sciences. The building has state-of-the-art research and teaching laboratories, a number of which are shared spaces used by several of the sciences. The chemistry department occupies the first and second floors of the building, and offices and laboratories for biology are found on the top floor. A third-floor bridge within the atrium allows close contact between the biology laboratories and offices in Steitz Hall and those in Youngchild Hall.

The Campus Community

Lucia R. Briggs Hall
Briggs Hall, opened in 1997, houses the anthropology, economics, education, government, mathematics and psychology departments, with laboratories for developmental psychology, clinical psychology, social psychology, sound and language psychology, ethnography and archaeology/paleoanthropology. Other facilities include computer classrooms for mathematics and computer science and a statistics laboratory, along with other classrooms, seminar rooms and meeting rooms for departmental student organizations, the Office of Student Academic Services and the Center for Teaching and Learning.

Wriston Art Center
The Wriston Art Center features three spacious galleries; studios for painting, drawing, sculpture, printmaking, ceramics, computer-assisted art, photography and art metal; a visual-resources library; a print study room; a seminar room; a 150-seat auditorium; and an outdoor amphitheatre.

Music-Drama Center, Ruth Harwood Shattuck Hall of Music
The Music-Drama Center houses teaching facilities for the Conservatory of Music and the theatre arts department and is the site of concerts, recitals, dramatic productions, films and lectures. It contains studios, numerous practice rooms, classrooms and three performance spaces: the 250-seat William E. Harper Hall; the 500-seat Stansbury Theatre; and a smaller experimental theatre, the F. Theodore Cloak Theatre. The webcast studios of student-run WLFM are also located in the Music-Drama Center.

The Ruth Harwood Shattuck Hall of Music, opened in September 1991, connects the Music-Drama Center with the Lawrence Memorial Chapel. It provides additional classroom space, two large rehearsal rooms, including Elizabeth Miller Hall, jazz and percussion studios, faculty studios, practice rooms, student study areas, the Carl J. Waterman Ensemble Music Library, instrument storage and a recording studio.

Seeley G. Mudd Library
The library's primary purpose is to support the liberal arts curriculum of the university. To this end, the library staff builds and organizes the library's collection and provides the best possible service to faculty and students as they engage in the teaching and learning process.

The library collection consists of over 390,000 books and periodicals; 340,000 government documents; 1,870 current periodical subscriptions; 16,712 music scores; 124,000 video and audio recordings and microform items; and an increasing number of digital materials. The Milwaukee-Downer Room houses a rare book collection of over 3,400 items dating back to the 16th century, while the Lincoln Reading Room contains published materials about the life of Abraham Lincoln and the U.S. Civil War. The Archives contain historical documents and artifacts of Lawrence University and Milwaukee-Downer College and the Visual Resources Library in the Wriston Art Center provides access to a wide variety of photographic and digital images.

To teach students how to identify, retrieve and evaluate appropriate materials, librarians work with classes as assignments are made and provide individual instruction at the reference desk. The library is open 110 hours per week, with extended hours during exams.

The library's computer system offers a gateway to the Lawrence collection, as well as to other library catalogs, full-text online resources and the World Wide Web.

The Campus Community

The Mudd Library provides well-designed group study rooms, individual carrels, lounge seating and offices for students to use for research projects. There also are media-viewing and listening facilities. Students may connect to the campus network at various locations in the building, using their own laptop computers and there is a wireless network available throughout the library.

Information Technology Services
Information Technology Services staff members have offices in the library, where the Information Technology Center provides the setting for non-credit technology training for all members of the Lawrence community. Computer facilities for use by faculty, staff and students are widely distributed throughout the campus. The university provides central computing servers accessible from all parts of campus over a high-speed network and offers world-wide communication via the Internet. Data connections are available from student rooms in residence halls and small houses. In addition, wireless network access is available in the Warch Campus Center, Briggs Hall, Main Hall, Memorial Hall, Mudd Library, Steitz Hall, Shattuck Hall and Youngchilld Hall (new locations are added each year), and many other campus locations provide ports for wired connection to the campus network.

The large residence halls contain computing labs with laser printers. Principal academic buildings contain additional public labs as well as interdepartmental facilities tied more closely to aspects of the curriculum, such as foreign languages, studio art, applied statistics, music and the social sciences. While applications of computing are thus found throughout the Lawrence curriculum, powerful high-resolution graphics workstations are located in laboratories for studio art, computer science and physics and several other science departments use computing equipment extensively in their course offerings.

Lawrence Memorial Chapel
Built in 1918 and renovated for the second time in 1993, the 1,200-seat Lawrence Memorial Chapel is used for public events such as the Lawrence Artist and Jazz Series, ensemble concerts, public meetings and the university convocation series. In recent years, the chapel has been host to such performing artists as Emmanuel Ax, the King's Singers, Joshua Bell, Wynton Marsalis and the Lincoln Center Jazz Orchestra, Richard Stoltzman, the Eroica Trio, Bobby McFerrin, the Academy of Ancient Music, the Mingus Big Band and Dianne Reeves.

Residence Halls and Dining Services
Lawrence is a residential college, and more than 95 percent of all students live on campus in one of the residence halls or small houses. Campus life is designed to promote the educational and social development of students. Residence halls are supervised by professional residence hall directors, college graduates trained specifically to deal with residential living. Each residence hall director supervises a team of student residence life advisors (RLAs) whose main function is to help students acclimate to campus and residential living. Each hall is small (no more than 185 students), and community-building is the prime objective.

Each hall is unique and displays that distinctiveness in many ways. The oldest is Ormsby Hall (1889) and the newest is Hiett Hall (2003), located on the hillside behind Ormsby, overlooking the Fox River. The 79,500-square-foot building houses 183 students in suite-style accommodations.

The Campus Community

Kohler Hall is Lawrence's substance-free residence, and all campus residences are smoke-free. Representative hall governments establish residence hall rules, which supplement university regulations. Each residence building on campus quickly becomes "home" to the residents, and students are encouraged to respect it and use it as such. Residential living at Lawrence is an integral part of a student's total education, and the members of the professional and student staff make it their goal to make living on campus an enriching experience.

Students living on campus eat in either of several dining facilities located in the Warch Campus Center. Dining options include an all-you-care-to-eat dining room, a cafe and coffee shop and a convenience store. Private dining rooms are available for small groups and meetings.

Warch Campus Center
The Richard and Margot Warch Campus Center is a stunning facility overlooking the Fox River where the Lawrence community comes together for dining, studying, relaxing and having fun. The building is LEED-certified, Gold status, a reflection of Lawrence's commitment to sustainable environmental stewardship.

The 107,000 square foot, four-story building showcases the scenic beauty of its location with striking vistas of the Fox River and vast, light-filled spaces including: flexible entertainment, activity and meeting/conference spaces; campus dining services and catering facilities; a state-of-the-art cinema; beautifully furnished lounges; offices, storage and workspace to support Campus Life operations and student organizations; student publication facilities; the information desk and services; apparel and convenience stores; and a full-service post office.

Diversity Center
The Diversity Center is a gathering place for students who wish to explore their cultural heritage and identity. The center features a comfortable lounge, seminar rooms and meeting rooms for campus organizations dedicated to increasing awareness of diversity-related issues. In addition to facility resources, the Office of Multicultural Affairs supports programs and annual student-focused events that promote the understanding and celebration of diversity.

International House
International House is Lawrence's center for international education and is devoted to cross-cultural experiences and understanding. The first floor provides gathering places for international students, language tutoring, organizational meetings, receptions and meals of all kinds. The second floor houses the Off-Campus Programs Office, the Office of International Student Services, the TSA program for visiting Japanese students and the ArtsBridge America office.

Alexander Gymnasium and athletic fields
Alexander Gymnasium, completely renovated in 1986 and updated in 2010, is the center for 18 of Lawrence's 22 varsity sports. Facilities at the gymnasium include two regulation gym floors, a weight room, aerobic training room, a team meeting and video room, a student-athlete lounge and batting cages. The gymnasium also houses the offices of the Department of Athletics and Recreation.

Six tennis courts are on the campus close to three of the residence halls. Near the gymnasium are the Banta Bowl, a 5,255-seat football stadium and lighted field built into a natural ravine; Whiting Field, which has an eight-lane all-weather track; and playing fields for baseball, softball and soccer.

The Campus Community

Buchanan Kiewit Center
Dedicated almost exclusively to health and recreation, the Buchanan Kiewit Center contains an eight-lane swimming pool and diving well, a gymnasium equipped for basketball, volleyball, tennis and badminton, a four-lane running track, a weight and exercise room, a dance studio, racquetball courts and saunas. It also is home to men's and women's varsity swimming and diving and men's and women's varsity fencing.

Athletics and recreation
Athletics at Lawrence are seen as a co-curricular piece of the students' educational experience. Through intercollegiate sports, club sports and a broad intramural and recreation program, the university offers opportunities to compete or just have fun for both men and women.

The varsity athletic teams are members of the Midwest Conference (MWC) and the National Collegiate Athletic Association, Division III (NCAA III). Hockey is in the Midwest Collegiate Hockey Association. Lawrence offers 12 varsity sports for men, ten for women, and numerous club sports, intramural sports and activities for both.

Many students participate in intramural and recreation programs. These activities provide physical fitness and the joy of competition without the time commitment and discipline required at the varsity level.

Student publications
Students have full control and responsibility for the weekly campus newspaper, The Lawrentian; for Ariel, a largely pictorial yearbook; and for Tropos, a magazine of original poetry, fiction and visual art; All student publications share production and meeting space in Warch campus Center.

Music
Music pervades life at Lawrence for both the casual listener and the ardent performer. There are weekly student and faculty recitals and frequent concerts by Lawrence ensembles, including the Jazz Ensemble, the Symphony Orchestra, the Concert Choir, the Cantala Women's Choir and the Wind Ensemble, which are free and open to the public.

According to their interests and abilities, students have a chance to sing opera, play in a concert band, or perform their own jazz compositions. Lawrence ensembles come under the auspices of the Conservatory of Music, but membership is open to all students by audition, and nearly all musical groups include members from the college.

Theatre
Every year, numerous dramatic and musical productions enable interested students to try their hand at acting, set designing, or even playwriting. Three major plays are performed annually. The selection has ranged from Greek classics to contemporary experimental plays, from Shakespeare to the Theatre of the Absurd. In recent years, productions have included Molière's "The Learned Ladies," Leo Tolstoy's "Anna Karenina," "Little Eva Takes a Trip," by Rebecca Gilman and Rupert Holmes's "The Mystery of Edwin Drood." Popular musical offerings have included Cole Porter's "Kiss Me, Kate," "Little Shop of Horrors," and "Working," based on the book "Working" by Studs Terkel. The Conservatory Opera has recently performed "Suor Angelica" and "Gianni Schicchi" by Giacomo Puccini, "Hansel and Gretel" by Englebert Humperdinck, Francis Poulenc's "Les Mamelles de Tirésias," "The Consul" by Giancarlo Menotti

and Gilbert and Sullivan's "The Mikado." Major productions are supplemented by numerous student-directed one-act plays and special projects.

Film
The Classic Film Club offers classic American and international films.

Additional film series are sponsored by academic departments, the Campus Life Office, or as part of special programs.

Lectures
See Speakers and Other Campus Visitors.

Lawrence University Community Council
The Lawrence University Community Council (LUCC) governs most non-academic matters. Since 1968, students and faculty have successfully worked together on social and other noncurricular issues. The council's structure reflects the community. It has a student president and vice president, 14 student representatives and three faculty representatives.

The LUCC concept of government demands more than the usual amount of cooperation, interest and involvement by students and faculty. The council constantly reviews its legislation in an attempt to keep policies up-to-date, and it strives to meet the challenges of new community issues as they arise.

Volunteer and community service
Volunteer opportunities play an important role in educating students for lives of service and community responsibility. The Volunteer and Community Service Center, located in Raymond House, is committed to helping Lawrentians identify, participate in, and reflect upon service opportunities. Staffed primarily by students, the office maintains resource files and a volunteer database, sponsors both one-time and long-term volunteer experiences and facilitates the activities of student organizations dedicated to service. The Volunteer and Community Service Center values the holistic development of volunteers, supporting students, staff and faculty in their service endeavors from preparation to evaluation.

Service projects and volunteer placements address at-risk youth, seniors, environmental issues, social justice, education, literacy, the arts and a variety of other populations and topics.

Health and Counseling Center
The Landis Health and Counseling Center is located adjacent to Colman Hall. A common waiting area serves students visiting the nurse, physicians and counselors. Educational materials are available on topics related to health, mental health and wellness.

Campus organizations
Students participate in nearly 100 organizations, including various governance committees, athletic and recreational clubs, academic societies, fraternities and sororities and religious organizations. More information about campus organizations can be obtained from the Campus Life Office.

The Campus Community

Students form organizations around interests ranging from hobbies and avocational activities to social issues and cultural awareness. A number of academic departments sponsor clubs. Each group plans programs that can be shared with the larger campus community. Meetings are open to the entire student body.

About 15 percent of the student body participates in a fraternity or sorority. Lawrence is host to three sorority and four fraternity chapters, each representing a national or international organization. Sororities include Delta Gamma, Kappa Alpha Theta and Kappa Kappa Gamma. Fraternities include Beta Theta Pi, Delta Tau Delta, Phi Kappa Tau and Sigma Phi Epsilon.

Planning an Academic Program

Students must plan ahead if they are to meet the goals of a liberal arts education. The first step toward planning is to become aware of the range of Lawrence's curricular offerings and programs. The Course Catalog contains this information, and students should become thoroughly familiar with it. Students should then discuss their academic programs regularly with their faculty advisors and, as needed, with advisors of programs or instructors of courses in which they have an interest.

Upon entering Lawrence, each student is assigned a faculty advisor to give advice and perspective on developing an educational program.

Students who build strong relationships with their advisors will benefit most from a Lawrence education. If necessary, students may change or add advisors as they develop a close working relationship with another faculty member. Students should have an advisor in their major field of study by the spring term of their sophomore year as they register in advance for their junior year. If not, they must have a major advisor by the beginning of their junior year.

Over the academic year, freshmen typically enroll in seven courses in addition to the Freshman Studies sequence. They will take courses in their general area of intellectual interest and explore new areas as well. They should consider Lawrence's General Education Requirements as well as other course options in their plans. For example, Bachelor of Music students have fewer choices in the first year since they must also take music theory and private lessons. Some majors and preprofessional programs may require that specific course sequences be started in the freshman year. Students also may want to consider off-campus programs. They should learn when these programs are offered and what, if any, coursework is required for participation in them. Finally, students may want to think ahead to postgraduate study.

Most students select a major during the sophomore year and certainly by the beginning of the junior year, after they have had an opportunity to sample coursework in a variety of disciplines. Once they have determined a major, they consult with a faculty member in that department and plan their future academic program. This planning should take into account not only the requirements of the major but also courses in other areas that might complement the major or other particular interests. Again, postgraduate plans may be important considerations.

Planning is essential, but it need not be rigid. Initial interests students have on arrival at Lawrence usually change as a result of exposure to new and different areas of study.

The structure of the curriculum

The curriculum of the university is structured into three parts. For the Bachelor of Arts degree, students take approximately one-third of their coursework in general education, another third in their major course of study and a final third in elective areas of study. Bachelor of Music students take approximately one-third of their courses in general education and the other two-thirds in music-related study.

Planning an Academic Program

General education
To ensure that Lawrence students gain familiarity with the principal academic disciplines and with the modes of thought and expression appropriate to each, approximately one-third of the coursework required for the bachelor's degree is in general education.

The general education component of each degree program consists of three parts. The purpose of the distribution requirements is to ensure that students graduating from Lawrence experience the breadth of study central to a liberal arts education. The purpose of the diversity requirements is to prepare students for positions of leadership within an increasingly diverse American society and an increasingly interconnected world. The skills represented by the competency requirements are fundamental to the study of the liberal arts and prerequisites for success in any discipline or profession.

Distribution: divisions within the university
Lawrence University organizes its curricular programs and offerings into divisions that are further described in the degree requirements. The divisions are as follows:

> ***Humanities***: Chinese, Classics, English, French and Francophone Studies, German, History, Japanese, Philosophy, Religious Studies, Russian and Spanish.
> ***Natural sciences:*** Biochemistry, Biology, Chemistry, Geology, Mathematics and Computer Science and Physics.
> ***Social sciences:*** Anthropology, Economics, Education Studies, Government, and Psychology.
> ***Fine arts:*** Art and Art History, Music and Theatre Arts.

Interdisciplinary programs, such as Biomedical Ethics, East Asian Studies, Environmental Studies, Ethnic Studies, Gender Studies and Linguistics are usually non-divisional. However, such non-divisional courses, as well as education and university courses may be assigned divisional affiliations when appropriate.

Diversity and competencies
Certain classes offered during particular terms have been designated as addressing the diversity and competency requirements that are part of the General Education Requirements of each degree program. These classes are structured to meet specific guidelines determined by the faculty of the university and reflect a dimension of the curriculum not captured by course subject and number.

Diversity requirements call for at least one course with a global perspective focusing on an area outside Europe and the United States and one course exploring dimensions of diversity in contemporary American society.

Competency requirements specify courses that improve fundamental skills central to a liberal arts education and include courses designated as writing intensive, speaking intensive, emphasizing quantitative reasoning and leading toward proficiency in a foreign language.

Classes identified as meeting diversity or competency requirements are identified in the class schedule published each term on the registrar's website (www.lawrence.edu/dept/registrar/).

Planning an Academic Program

Freshman Studies
Entering students are enrolled in *Freshman Studies*, a two-course sequence specifically designed to acquaint students with the modes of inquiry characteristic of intellectual discourse at Lawrence and to improve their reading, writing and speaking skills. The program does more than develop these basic academic skills, however. While studying distinctive works suggested by all academic divisions, students engage in critical analysis and discussion of important ideas that are timelessly relevant. *Freshman Studies* is both an introduction to and an important part of a Lawrence education.

Senior Experience
Senior Experience is the next step in the evolution of Lawrence's liberal arts curriculum, an experience that engages all Lawrence seniors in an academic project demonstrating proficiency in their major field of study, the integration of knowledge and skills gained during their years at Lawrence, and the development of scholarly or artistic independence. Described by some as a "bookend" to Lawrence's nationally recognized *Freshman Studies* program, *Senior Experience* is born from our culture of individualized learning where students and faculty work closely to develop a path for learning, culminating in a project that prepares them for the transition to life after Lawrence.

Majors
Liberal learning calls for depth and focus as well as breadth of knowledge. The academic major gives students the opportunity to master a subject, while providing the challenge and pleasure of learning something thoroughly.

Lawrence provides its students with an opportunity to work in the major academic areas in ways that best suit their interests, talents and plans. Most students choose to major in a single discipline. Some students design their own majors. Others pursue double majors. All Lawrence major programs, however, share as their foundation the commitment to a schedule that is substantially integrated and methodologically as sophisticated as the discipline allows.

Students pursuing double majors, double degrees and education certification, are strongly encouraged to consult with their advisors and relevant department chairs to plan and negotiate their overall Senior Experience as early as possible, especially if they are interested in pursuing an interdisciplinary capstone that integrates their interests in both majors, or combines their student teaching with a project in their major. Students with double majors or degrees may propose initiatives that span multiple departments but all departments must approve such proposals before the project goes forward.

Minors
Minors provide an opportunity for students seeking the Bachelor of Arts or Bachelor of Music degree to do organized and focused work in a field outside the area of their majors. Some students will combine majors and minors in closely related fields — biology and chemistry, for instance, or English and history — while others will use minors to explore subjects very different from their major areas. Minors are offered by almost all curricular departments of the university.

Interdisciplinary areas
The rigor of a major is still the best method of guiding, coordinating and integrating a student's advanced scholarly work in a liberal arts college. But knowledge does not come boxed in disciplines and departments, and students' interests and needs often cross the boundaries of their majors into many related areas.

Planning an Academic Program

Interdisciplinary areas at Lawrence allow students pursuing a Bachelor of Arts or Bachelor of Music degree to cross departmental or disciplinary boundaries and address issues from several perspectives. Every Lawrence student still chooses a major and fulfills its requirements, but students who satisfy the requirements of an interdisciplinary area of concentration may have the area listed on their transcripts along with the declared major.

Each interdisciplinary area constitutes a field of study that allows students to explore particular themes, topics, or problems from the perspective of several disciplines. Lawrence has established interdisciplinary areas in biomedical ethics, international studies and neuroscience (please see Courses of Study where interdisciplinary areas are listed alphabetically along with departmental listings).

Performance areas and areas of emphasis
Students pursuing a Bachelor of Music degree with a major in performance must select a performance area for their studies (piano, organ, harpsichord, voice, strings, classical guitar, winds, or percussion).

Performance majors may choose to complete an optional area of emphasis in piano accompanying, piano pedagogy, or jazz and improvisational music.

Majors in music education must select from five areas of emphasis (general, choral/ general, instrumental, instrumental/general and choral/general/instrumental).

Theory/composition majors may elect to complete an area of emphasis in jazz and improvisational music.

University Courses
University Courses deal with subjects of interest and importance that are outside the purview of any given department. Usually interdisciplinary, University Courses call upon students and faculty to integrate ideas from sometimes disparate fields of knowledge. Alternatively, they provide opportunity for faculty to present material of specific scholarly interest or expertise. Students from all disciplines may enroll in University Courses.

Individual courses of study
Student-initiated options for study are a long-standing feature of the Lawrence curriculum. Most often, students elect tutorials or independent study in order to pursue topics of special interest in depth. Lawrence students usually participate in at least one of these two options during the four years. Most often, students pursue tutorials or independent study in the department of their majors, but they may, when qualified, undertake such work in other departments.

Additional opportunities for individual courses of instruction include directed study, student-designed courses, student-designed majors, writing for credit and academic internships (please click here for details on these special options and for specific information on Lawrence's academic internship policy).

Off-campus study
Lawrence University encourages students to extend their program of study by choosing to participate in the challenging educational and cultural experiences offered through its portfolio of off-campus study programs. Lawrence operates programs of its own, including the London Centre, and also offers programs operated by other organizations, such as the Associated Colleges of the Midwest (ACM) and the Institute for the International Education of

Students (IES), which have been evaluated by the faculty and approved for Lawrence affiliation.

It is best to plan ahead for an off-campus experience when considering options for major and minor programs of study. With that in mind, it is strongly recommended that students interested in off-campus study make an appointment with the off-campus program advisor as early as the freshman year to explore the range of possibilities for including off-campus study in their degree program.

Lawrence also engages in cooperative arrangements with certain professional schools that allow students to combine two or three years of study here and subsequent enrollment at the professional school toward the attainment of two degrees. Students may contact the designated advisors for further information and guidance.

Course numbering and course credit
100-199: Introductory courses generally do not require prior study unless they are part of a sequence, such as introductory language or mathematics courses. This level includes courses introducing students to the discipline as well as any topical courses aimed at non-majors.

200-399: Foundation/gateway courses represent the second tier of work in each discipline and might include methods courses and introductions to sub-disciplines. Typically these courses are not appropriate for entering freshmen, but in some departments they might be appropriate for continuing students with no prior experience in the subject.

400-599: Advanced courses include seminar series, special-topics courses and advanced work in sub-disciplines. Students enrolling in advanced courses are expected to understand the basic methodology of the discipline.

600-699: Capstone courses include the culminating work in a discipline and are not appropriate for students who are neither majors nor minors in the discipline.

A standard course at Lawrence is valued at 6 units. A normal course load for a term is three standard courses, or 18 units. For more information about course loads and how to translate Lawrence units into semester or quarter hours, please see Academic Procedures and Regulations.

It is the responsibility of the student to satisfy any prerequisites listed for specific courses. Faculty members may refuse to admit to their classes any student who has not satisfied listed prerequisites.

Postgraduate considerations
Career planning
The Career Center offers a wide range of services to all Lawrentians — undergraduates and graduates alike. These include individual career counseling to assist in identifying career interests and skills, as well as assistance in developing internships, summer employment and reference files. The Career Center also sponsors job and internship fairs and on-campus recruiting opportunities. The center offers workshops and seminars to increase career awareness and to improve job-search skills. It also collects and publicizes information on specific job and internship opportunities.

Planning an Academic Program

Graduate study
Students can discuss options for postgraduate study with any faculty member. In addition, students interested in graduate and professional schools will find a variety of valuable resources in the Career Center. Students can research information on specific schools and programs, on graduate and professional school entrance examinations and on financial aid. The Career Center also offers computer-based practice tests for students interested in honing their testing skills before taking a graduate school exam. Lawrence serves as a center for the administration of the Graduate Record Examination (GRE) subject tests, the Law School Admission Test, the Foreign Service Examination and the Medical College Admission Test (MCAT).

Professional study
Lawrence strongly believes that liberal education — with its emphasis on skills of analysis and communication, on breadth of knowledge, and on the ability to pursue knowledge of one area in depth — affords the best preparation for rigorous professional study. Since these attributes of liberal education can be developed and nurtured regardless of a student's area of concentration, in most cases Lawrence does not prescribe fixed courses of study for students with preprofessional interests.

At the same time, we recognize that some professional programs and schools require specific preparation at the undergraduate level. Faculty and other advisors assist students in determining what preparatory studies, if any, will be essential or valuable for later work in these areas. Students with specific professional goals should consult with these advisors as early as possible — in some instances during the freshman registration period.

Pre-Business
Advisor: M. Finkler
Students who plan to undertake postgraduate study in business — in most cases a program leading to a master's degree in business administration — normally are advised to supplement the major of their choice and the university's General Education Requirements with coursework in mathematics, as well as statistics, economics and computer science. In addition, they should pay particular attention to the development of writing skills.

Pre-Law
Advisor: S. Wulf
Legal studies require strong analytic skills, a knowledge of society and the ability to communicate effectively. Students planning to attend law school normally are advised to supplement the major of their choice and the university's General Education Requirements with some coursework in philosophy and the theoretical and analytic aspects of their field of concentration, as well as coursework in the social sciences.

Health Careers
Advisors: N. Maravolo (chair), E. De Stasio, D. Martin
The Health Careers Advisory Committee works closely with students as they apply to medical schools and other programs to prepare for health science and allied health careers. It provides guidance in the selection of schools, in developing applications, in the preparation for interviews and in planning for medical school admissions testing.

Students who plan to attend medical school may concentrate in the field or fields of their greatest interest. Medical schools do, however, require considerable work in the natural sciences, including biology, chemistry and physics, as well as English. Members of the Health Careers Advisory Committee are available to help students select courses that will meet

the requirements of medical schools and at the same time provide a broad liberal education.

Lawrence offers a number of programs designed to familiarize students with the nature of medical education and practice. These programs include workshops, discussions with local physicians and opportunities to observe, under the supervision of local practitioners, various aspects of the medical profession. The college also sponsors Mielke and Kasel Summer Internship Grants. The former provides opportunities to study medical problems in the Fox Valley, and the latter offers internships in biomedical ethics, health economics and medical humanities.

Teacher certification
Lawrence offers certification at the secondary level in most subjects and at the elementary and secondary level in music, foreign language and art. Students generally student-teach during their senior year, but, to encourage students to pursue this certification, a 13th term of student teaching is available without normal tuition charges in the fall following graduation. Those interested in student teaching should consult with the education department faculty at their earliest opportunity.

Degree and General Education Requirements

Residence Requirements
To qualify for a Lawrence University B.A. or B.Mus. degree, students are required to have a minimum of six terms in residence and earn 108 units (Lawrence foreign study programs, Associated Colleges of the Midwest programs and other special arrangements under Lawrence sponsorship included). Nine terms in residence and 162 units are required for the five-year B.A. and B.Mus. double-degree program.

Students must be in residence on the Appleton campus until they have completed the Freshman Studies requirement.

The last three terms of work and a minimum of 54 units submitted for the graduation requirements must be done in residence unless a department (or departments, or advisory committee, where appropriate) previously has certified completion of the requirements for a major. This requirement, or one of its parts, may be waived by the admissions office in the case of incoming transfer students or by the Faculty Subcommittee on Administration in any other cases.

Bachelor of Arts Degree
Students seeking the Bachelor of Arts degree will complete approximately one-third of their work in each of three areas: Freshman Studies and General Education, a major and elective study. The Freshman Studies and General Education Requirements are designed to promote the breadth of study central to a liberal arts education, perspective on issues critical to a diverse America and an interconnected world and the development of skills essential for success in any discipline or profession. The completion of a major provides focused, in-depth work in a single discipline. Elective study affords students opportunities to develop secondary interests, work in areas complementary to their primary discipline, or explore new fields of study.

Requirements for the Bachelor of Arts Degree

1. Completion of 216 units. Of the 216 units required for the degree, a student must present:
    a. a minimum of 72 units from courses numbered 200 or above
    b. no more than 162 units from a single division
    c. no more than 90 units from a single department, except that in the art department a student may present no more than 126 units, no more than 90 of which may be in studio art and no more than 90 of which may be in art history.
    d. no more than 42 units in education
    e. no more than 12 units from academic internships
2. In the freshman year, 12 units of Freshman Studies
3. Completion of the General Education Requirements:
    a. Distribution, in order to gain exposure to a range of disciplines, subjects and perspectives within the liberal arts:
        i. 6 units selected from departments and courses listed within the Division of Humanities. All courses in the Humanities taught in English will count toward this requirement. Humanities courses taught in a foreign language and numbered 300 and above will count toward this requirement, except as noted in the course catalog.
        ii. 6 units selected from departments and courses listed within the Division of Fine Arts;

iii. 6 units selected from departments and courses listed within the Division of Social Sciences;
iv. 6 units selected from laboratory courses in biology, chemistry, geology, or physics in the Division of Natural Sciences.

Please see Distribution: divisions within the university.

b. Diversity, in order to prepare students for a more global world and a more diverse America:
   i. 6 units selected from courses designated as either emphasizing global and comparative perspectives on the world or focusing on areas outside Europe and the United States;
   ii. 6 units selected from courses designated as focusing on dimensions of diversity, such as race, ethnicity and gender, that are of particular importance in understanding contemporary society in the United States.
c. Competency, in order to improve and reinforce those fundamental abilities central to a liberal arts education:
   i. 6 units selected from courses designated as writing intensive or 6 units selected from courses designated as speaking intensive;
   ii. 6 units selected from courses designated as emphasizing mathematical reasoning or quantitative analysis;
   iii. 6 units in a foreign language taken from courses numbered 200 or above and taught primarily in a language other than English. This requirement may also be satisfied by attaining a score of 4 or 5 on an Advanced Placement examination in a foreign language or by passing a proficiency examination administered by a Lawrence University foreign language department.

Stipulations Pertaining to the General Education Requirements for the Bachelor of Arts degree
Qualified courses may count toward the requirements in any two of the categories above (distribution, diversity and competency). Some courses may meet two requirements within a category. No single course can be used to fulfill more than two requirements. Credits granted pursuant to university policy for examinations (Lawrence Advanced Placement (AP), International Baccalaureate (IB), or A-levels) may be used as appropriate to fulfill diversity or competency requirements only (see also Evaluation of Credit for Transfer Students).

4. Completion of a major — departmental, interdisciplinary, or student-designed — including all course and non-course requirements, such as departmental examinations, research projects and presentations, portfolios, etc. Students are required to declare a major by the beginning of the junior year.
5. Completion of the designated Senior Experience course or activity within the chosen major.
6. An academic record that meets the following standards:
   a. A 2.000 grade-point average in all Lawrence courses.
   b. A 2.000 grade-point average in the college major (all courses taken in the major department and any required courses outside the major department).
7. Completion of the required terms and units in residence as specified by the university residence requirements residence requirements.

Degree and General Education Requirements

Bachelor of Music Degree
The Bachelor of Music is a professional degree. Courses in music represent approximately two-thirds of the curriculum, while one-third is devoted to Freshman Studies and General Education Requirements.

In addition to academic policies and regulations, students in the conservatory are subject to policies and procedures detailed in conservatory department guidelines and the Conservatory Student Handbook.

Admission to the Degree
An entrance audition is required of all applicants for admission to the Bachelor of Music degree. Bachelor of Arts students who wish to become Bachelor of Music students must petition the Conservatory Committee on Administration for admission. Bachelor of Music students who wish to become Bachelor of Arts students must petition the University Faculty Subcommittee on Administration for acceptance into the Bachelor of Arts degree program. Such changes are not normally allowed before the end of the freshman year nor later than the beginning of the junior year.

Bachelor of Music students must complete the appropriate qualifying examination(s), normally by the end of the sophomore year.

Requirements for the Bachelor of Music Degree

1. Completion of a minimum of 216 units. The following music courses are used in the computation of the degree grade-point average but are excluded from the total of 216 units required for the degree: MURP 201, 202, 203, 301, 302 and MUTH 161, 162, 171, 172.
2. Of the 216 units required to complete the degree, a student must present:
    a. a minimum of 144 units in music
    b. a minimum of 60 units in courses other than music.
    c. no more than 12 units from academic internships
    The additional 12 units may be selected from any department.
3. In the freshman year, 12 units of Freshman Studies.
4. Completion of the General Education Requirements:
    a. 6 units selected from courses designated as writing intensive
    b. International diversity. One of the following:
        i. 6 units selected from courses designated as either emphasizing global and comparative perspectives on the world or focusing on areas outside Europe and the United States
        ii. 12 units selected from courses numbered below 200 in a single foreign language. This requirement may also be satisfied by attaining a score of 4 or 5 on an Advanced Placement examination or by passing a proficiency examination administered by a Lawrence University foreign language department.
        iii. Participation for one term in a Lawrence or affiliated off-campus study program held outside the United States

Note: While some music courses may satisfy General Education Requirements, a minimum of 60 units in courses other than music is required for the degree.

Stipulations Pertaining to the General Education Requirements for the Bachelor of Music Degree
A single course may be used to satisfy both requirement a. and requirement b. above. Credits granted pursuant to university policy for advanced placement or for transfer work may be used to fulfill General Education Requirement (see also Evaluation of Credit for Transfer Students).

5. Completion of music core requirements:
   a. Music theory
      i. MUTH 151, 161, 171 or MUTH 201, 211, 221
      ii. MUTH 152, 162, 172 or MUTH 202, 212, 222
      iii. MUTH 251, 261 and 271
      iv. MUTH 252, 262 and 272
      v. MUTH 301, 311 and 321
   b. Music history
      i. MUHI 201 and 202
      ii. 12 units selected from courses in music history numbered 400 or above
   c. Keyboard skills: MURP 201, 202, 203 or MURP 301, 302
   d. Applied music individual instruction as specified under requirements for the major and areas of emphasis
   e. Ensemble study: a minimum of 12 units. Students are required to participate in an ensemble every term in which they are attending classes on the Appleton campus. Requirements for specific types of ensemble study (MUEN) are specified under requirements for majors and areas of emphasis.
6. Completion of a major in music — performance, music education, theory/composition, or student-designed — including all course and non-course requirements, such as recitals, qualifying examinations, etc. A student is expected to pass a qualifying examination after no more than six terms of study.
7. Completion of the designated Senior Experience course or activity within the chosen major
8. An academic record that meets the following standards:
   a. A 2.000 grade-point average in all Lawrence courses.
   b. A 2.000 grade-point average in the music major (all music courses and non-music courses required for the major) unless otherwise specified under the major requirements.
9. Completion of required terms and units in residence as specified by the residence requirements.

Bachelor of Arts/Bachelor of Music Double-Degree Program
Professional study in music and study in the liberal arts may be combined in a five-year program leading to both Bachelor of Music and Bachelor of Arts degrees, the latter with a major other than music. Both degrees are awarded at the conclusion of the five-year program. Interested students should discuss this possibility with their advisors as early as possible.

Approximately half of the curriculum is devoted to the study of music — completion of the music core and requirements for a major in performance, music education, or theory/composition. The other half of the curriculum mirrors that of the Bachelor of Arts program, emphasizing breadth of study central to a liberal arts education, focused study in the college major and elective study to complement other work or explore other fields of interest.

Degree and General Education Requirements

Certain majors in the Bachelor of Arts degree program (for example, some laboratory sciences) may be difficult to combine with the Bachelor of Music degree program into a five-year double-degree program, especially if the student's objective is to maintain serious options for graduate or professional work in both areas after graduation. Such combinations may require that course overloads be taken to complete minimum requirements in each major in a timely and satisfactory manner. Early and regular consultation with advisors in both the college and the conservatory is imperative. Further, students who seek certification for purposes of teaching a subject other than music are urged to see the associate dean of the conservatory.

In addition to academic policies and regulations, students in the conservatory are subject to policies and procedures detailed in conservatory department guidelines and the Conservatory Student Handbook.

Requirements for the five-year Bachelor of Arts/Bachelor of Music Degrees

1. Completion of a minimum of 15 terms of study and 270 units. Of the 270 units required, a student must present:
    a. a minimum of 144 units in music, exclusive of MURP 201, 202, 203, 301, 302 and MUTH 161, 162, 171, 172
    b. a minimum of 114 units selected from courses other than music
    c. no more than 42 units from courses in education
    d. a minimum of 72 units from courses numbered 200 and above
    e. no more than 90 units from a single department outside of music, except that in the art department a student may present no more than 126 units, no more than 90 of which may be in art and no more than 90 of which may be in art history
    f. no more than 12 units from academic internships
2. In the freshman year, 12 units of Freshman Studies.
3. Completion of the General Education Requirements:
    a. Distribution, in order to gain exposure to a range of disciplines, subjects and perspectives within the liberal arts:
        i. 6 units selected from departments and courses listed within the Division of Humanities. All courses in the humanities taught in English will count toward this requirement. Humanities courses taught in a foreign language and numbered 300 and above also will count toward this requirement, except as noted in the course catalog.
        ii. 6 units selected from departments and courses listed within the Division of Fine Arts;
        iii. 6 units selected from departments and courses listed within the Division of Social Sciences;
        iv. 6 units selected from laboratory courses in biology, chemistry, geology, or physics in the Division of Natural Sciences
    b. Diversity, in order to prepare students for a more global world and a more diverse America:
        i. 6 units selected from courses designated as either emphasizing global and comparative perspectives on the world or focusing on areas outside Europe and the United States;
        ii. 6 units selected from courses designated as focusing on dimensions of diversity, such as race, ethnicity and gender, that are of particular importance in understanding contemporary society in the United States.
    c. Competency, in order to improve and reinforce those fundamental abilities central to a liberal arts education:

i. 6 units selected from courses designated as writing intensive or 6 units selected from courses designated as speaking intensive;
ii. 6 units selected from courses designated as emphasizing mathematical reasoning or quantitative analysis;
iii. 6 units in a foreign language taken from courses numbered 200 or above and taught primarily in a language other than English. This requirement may also be satisfied by attaining a score of 4 or 5 on an Advanced Placement examination in a foreign language or by passing a proficiency examination administered by a Lawrence University foreign language department.

Stipulations pertaining to the General Education Requirements for the five-year Bachelor of Arts/Bachelor of Music Degrees
Qualified courses may count toward the requirements in any two of the categories above (distribution, diversity and competency). Some courses may meet two requirements within a category. No single course can be used to fulfill more than two requirements. Credits granted pursuant to university policy for examinations (Lawrence Advanced Placement (AP), International Baccalaureate (IB), or A-levels) may be used as appropriate to fulfill diversity or competency requirements only.

4. Completion of a college major — departmental, interdisciplinary, or student-designed — exclusive of music, including all course and non-course requirements, such as departmental examinations, research projects and presentations, portfolios, etc. Students are required to declare a major by the beginning of the junior year.
5. Completion of music core requirements:
    a. Music Theory
        i. MUTH 151, 161, 171 or MUTH 201, 211, 221
        ii. MUTH 152, 162, 172 or MUTH 202, 212, 222
        iii. MUTH 251, 261 and 271
        iv. MUTH 252, 262 and 272
        v. MUTH 301, 311 and 321
    b. Music History
        i. MUHI 201 and 202
        ii. 12 units selected from courses in music history numbered 400 or above
    c. Keyboard skills: MURP 201, 202, 203 or MURP 301, 302
    d. Applied music individual instruction as specified under requirements for the major and areas of emphasis
    e. Ensemble study: a minimum of 12 units. Students are required to participate in an ensemble every term in which they are attending classes on the Appleton campus. Requirements for specific types of ensemble study (MUEN) are specified under requirements for majors and areas of emphasis.
6. Completion of a major in music — performance, music education, theory/composition, or student-designed — including all course and non-course requirements, such as recitals, qualifying examinations, etc. A student is expected to pass a qualifying examination for admission to the major after no more than six terms of study.
7. Completion of a designated Senior Experience course or activity within the chosen majors for each degree.
8. An academic record that meets the following standards:
    a. A 2.000 grade-point average in all Lawrence courses.

   b. A 2.000 grade-point average in the music major (all music courses and non-music courses required for the major) unless otherwise specified under the major requirements.
9. Completion of required terms and units in residence as specified by the university residence requirements

Cooperative Degree Programs
A liberal arts education provides excellent preparation for careers in a variety of professions. For this reason, several professional schools have contracted with Lawrence for cooperative programs that enable students to build a foundation in the liberal arts and then acquire specific professional skills. These programs lead, in most cases, to the awarding of two degrees.

The Lawrence cooperative programs listed below generally provide for students to study at Lawrence for three years and then transfer to a professional school for two more years. To qualify for a Lawrence degree in these programs, students must earn 162 units and fulfill all other degree requirements that cannot be met in the professional school. Students must undertake careful planning with the professional advisors and with their own faculty advisors to make sure all requirements will be completed satisfactorily.

Engineering
Program advisor: J. Collett
Students wishing to combine a liberal arts program with professional training in engineering or computer science may want to choose the 3-2 program in engineering, which involves three years of study at Lawrence University and two years of study at an engineering school. Lawrence has formal affiliations with Columbia University (New York, New York), Rensselaer Polytechnic Institute (Troy, New York) and Washington University (St. Louis, Missouri), but students may transfer to any accredited engineering school with the agreement of the chosen institution. Upon satisfactory completion of the five-year program, these students will receive the Bachelor of Arts degree from Lawrence as well as a Bachelor of Engineering degree from the professional school they have attended. To prepare for the transfer to an engineering school, students must include among their courses basic mathematics (normally Mathematics 140, 150, 160 and 210), computer science (Computer Science 110 or 150), introductory chemistry (Chemistry 115 and 116), introductory physics with calculus (Physics 141 and 151 or 151 and 160) and six courses (36 units) in humanities and social sciences. Many of these courses also will figure in the student's major at Lawrence. Because specific requirements vary slightly among the engineering schools, students contemplating the 3-2 program should consult early with the program advisor.

Forestry and Environmental Studies
Program advisor: N. Maravolo
The college offers a cooperative program with Duke University in the areas of environmental science and forestry. Upon satisfactory completion of this five-year program, spending three years at Lawrence and two at Duke's School of the Environment, the student will receive the B.A. degree from Lawrence and the professional degree Master of Forestry or Master of Environmental Management from Duke. The major emphases at Duke are in forest resource production, resource ecology, resource policy and economics, water and air resources and ecotoxicology. An undergraduate major in natural sciences, social sciences, or pre-engineering is good preparation for the programs at Duke, but a student with any undergraduate

concentration will be considered for admission. The student must complete a total of 48 units at Duke, which generally takes four semesters. The student must complete 162 units at Lawrence and fulfill all other requirements that cannot be completed at Duke. All students contemplating this cooperative program should plan to take work in ecology, economics and statistics at Lawrence before matriculating at Duke.

Some students may prefer to complete the bachelor's degree before undertaking graduate study at Duke. The master's degree requirements for these students are the same as those for students entering after the junior year, but the 48-unit requirements may be reduced for relevant, already completed undergraduate work of satisfactory quality. All credit reductions are determined individually and consider both the student's educational background and objectives.

Occupational Therapy
Program advisor: G. Metalsky
Lawrence offers a 3-2 program in occupational therapy in conjunction with the School of Medicine of Washington University, St. Louis. Students spend three years of study at Lawrence and then continue for five semesters and two summers in the occupational therapy program at Washington University. After two semesters of successful study at Washington University, Lawrence awards the Bachelor of Arts degree. The student then continues for three more semesters and two summers at Washington University to earn the Master of Science in Occupational Therapy degree. Students who complete this program are prepared to address the prevention and treatment of physical or mental dysfunctions that impair people's abilities to perform activities of daily life. Occupational therapists focus on the methods that permit individuals to engage in meaningful life activities. They also assist in modifying environments that make it possible for individuals to function at home, at work and in the community.

Lawrence students apply to the occupational therapy program of the School of Medicine, Washington University during the fall of the junior year and must meet the entrance requirements established by the occupational therapy program. The Washington University School of Medicine is one of the finest in the country and the occupational therapy program is competitive. A 3.000 Lawrence grade-point average is a minimum requirement but does not guarantee admission. Students who are admitted may apply for financial aid provided by Washington University.

To complete the occupational therapy program, students must complete 162 units at Lawrence, meet General Education Requirements and fulfill all requirements for a Lawrence major. Students also must fulfill the prerequisite course requirements for occupational therapy, as follows: Biology 110, 140 and 242; one additional biology course (6 units) numbered 200 or above; one additional science course (6 units) chosen from physics, chemistry, biology, or neuroscience; Psychology 250 and 260; one course (6 units) chosen from among Philosophy 100, Philosophy 120, Philosophy 320, Philosophy 440, Economics 290, or Government 495; two additional courses (12 units) chosen from the social sciences; and Mathematics 107. Completing Lawrence requirements and the prerequisite requirements will require careful planning, which must begin early in the Lawrence career. Students interested in this program should talk with their faculty advisors not later than the beginning of the sophomore year. Students should coordinate their plans with Students should coordinate their plans with the program advisor.

ANTHROPOLOGY

Professors: Peregrine
Visiting professor: Mason
Associate professors: Daughtry*, M. Jenike (chair)
Assistant professor: B. Jenike
Visiting assistant professor: Proctor

* On leave Term(s) I, II, III

Anthropology is the study of humanity in all its cultural, biological, and historical diversity. A synthesis of scientific and humanistic concerns and methods, it attempts to distinguish universal human characteristics from those unique to individual social groups, and to understand the reasons for differences between individuals and groups.

The insights of anthropology are essential for a critical understanding of the problems of the contemporary world. Anthropology informs a public confronted with choices to be made with respect to changing value systems; competing social goals; ethnic, religious, class, gender, and race relations; new and emerging technologies; environmental and cultural resources management; changing paradigms of health, wellness, and disease; and international relations.

Anthropology offers both unique theoretical perspectives and a particular set of methodological approaches. The faculty considers it essential that we educate our students in both. Students should take away from their studies a substantive knowledge of the commonalities and differences in human experiences and also an understanding of how that knowledge is obtained and evaluated.

The anthropology major thus prepares students for successful entry into any number of professional and graduate programs, as well as careers that require a multicultural approach and perspective. Our mission is to represent anthropology appropriately at Lawrence and in the wider communities within which we live and work, and to educate others wherever and whenever possible with the insights that anthropology has to offer.

The anthropology department at Lawrence includes a range of courses and opportunities for guided independent study from the complementary perspectives of archaeology, biological anthropology, and ethnology. Faculty members provide expertise in a number of ethnographic areas, including Africa, Asia, the Middle East, and North America. Topical interests include cultural evolution, refugee communities, medical anthropology, and biological anthropology. The department maintains a well-equipped laboratory, as well as collections of archaeological and ethnographic materials from many culture areas.

ANTHROPOLOGY

2010-2011 Course Catalog

Required for the anthropology major

1. Anthropology 110: *Cultural Anthropology*
   Anthropology 120: *World Prehistory*
   Anthropology 140: *Biological Anthropology*
2. Anthropology 200: *History of Anthropological Ideas*
   Anthropology 207: *Quantitative Analysis in Anthropology*
   Anthropology 210: *Research Methods in Cultural Anthropology*
   Students are expected to complete these courses during their sophomore year and no later than the end of their junior year.
3. Anthropology 501: *Research Questions*
   Anthropology 601: *Research Design*
4. Four six-unit elective courses in anthropology, including at least one upper-division seminar (courses numbered in the 500s). (Anthropology majors are urged to take several of these seminars in their junior and senior years.)

Required for the anthropology major: biological anthropology track

1. Anthropology 110: *Cultural Anthropology*
   Anthropology 120: *World Prehistory*
   Anthropology 140: *Biological Anthropology*
   Biology 110: *Integrative Biology: Principles*
   Biology 140: *Integrative Biology: Heterotrophs*
2. Anthropology 200: *History of Anthropological Ideas*
   Anthropology 207: *Quantitative Analysis in Anthropology or* Biology 280*: Experimental Design and Analysis*
3. Anthropology 501: *Research Questions*
   Anthropology 601: *Research Design*
4. Three six-unit elective courses in anthropology, including at least one of Anthropology 540: *Topics in Biological Anthropology or* Anthropology 580*: Topics in Neuroscience.*
5. Three six-unit courses in biology, chemistry, geology, mathematics, or physics, at least two of which must be biology courses numbered 200 or above and at least one of which must be a laboratory course.

Required for the anthropology minor

1. Two of the following courses:
   Anthropology 110: *Cultural Anthropology*
   Anthropology 120: *World Prehistory*
   Anthropology 140: *Biological Anthropology*
2. Three six-unit electives in anthropology, selected from courses numbered 200 and above, except Anthropology 501 or 601
3. One six-unit upper-division seminar (courses numbered in the 500s)
4. C average in the minor

ANTHROPOLOGY

***Senior Experience* in Anthropology**
The Department of Anthropology's *Senior Experience* is a two-sequence course which marks the culmination of a four-year series of core courses designed to develop the student's abilities to reason and practice as an anthropologist. Students begin their study of anthropology with a three-course introductory sequence; move on in their sophomore year to a three-course theory and methods sequence; continue in their junior year with Anthropology 501, which introduces them to the process of developing research questions; and in their senior year take Anthropology 601, which provides students the opportunity to reflect upon and synthesize what they have learned in the anthropology program by designing a focused research project. These projects are presented to the anthropology faculty and student majors during a formal symposium at the end of the Winter term.

Courses

ANTH 110
Cultural Anthropology
An introduction to the nature of culture, the organization of social relations, and the relationships between values and behavior. Attention to the human use of culture in adapting to environments and to language, technology, kinship, and religion as cultural systems. Case studies of Western and non-Western peoples. Units: 6.

Prerequisite: Freshman or sophomore standing; consent of instructor required for juniors and seniors

ANTH 120
World Prehistory
An introduction to the peoples and cultures of the world from 40,000 years ago to 2,000 years ago. Major events in world prehistory, such as the origins of agriculture, the rise of cities, and the spread of states, are examined and discussed. General trends in cultural evolution are proposed and evaluated. Units: 6.

Prerequisite: Freshman or sophomore standing; consent of instructor required for juniors and seniors

ANTH 140
Biological Anthropology
The study of humans as biological organisms. Topics addressed include processes of evolutionary change and stasis; primate diversity, ecology, and behavior; morphological, ecological, and genetic perspectives on human evolution; and contemporary human biological variation, including racial variation. Units: 6.

Prerequisite: Freshman or sophomore standing; consent of instructor required for juniors and seniors

ANTHROPOLOGY

ANTH 200
History of Anthropological Ideas
A study of the development of anthropology as a scholarly discipline and a method of inquiry. Consideration of theoretical perspectives such as evolutionism, historical particularism, functionalism, cultural materialism, structuralism, interpretive and postmodernist approaches, and also the significance of participant-observation and other field research strategies in shaping anthropological knowledge. Units: 6.

Prerequisite: ANTH 110, 120, or 140, preferably all three. Recommended for anthropology majors in the sophomore year; must be completed by the end of the junior year.

ANTH 207
Quantitative Analysis in Anthropology
An introduction to the collection and manipulation of quantitative data in anthropological research. Topics include sampling, measurement, and basic nominal and ordinal statistics. Units: 6.

Prerequisite: ANTH 110, 120, or 140, preferably all three; non-anthropology majors must obtain consent of the instructor. Recommended for anthropology majors in the sophomore year; must be completed by the end of the junior year.

ANTH 210
Research Methods in Cultural Anthropology
An introduction to basic assumptions and methods of research in sociocultural anthropology, including participant observation, ethnographic interview, focus groups, cognitive methods, survey, and census. Students gain hands-on experience in research. Units: 6.

Prerequisite: ANTH 110, 120, or 140, preferably all three; non-anthropology majors must obtain consent of the instructor. Recommended for anthropology majors in the sophomore year; must be completed by the end of the junior year. =

ANTH 220
Research Methods in Archaeology
Presents the research process in archaeology and offers an overview of essential data-collection and analysis techniques, including site survey and excavation, settlement pattern analysis, lithic analysis, and ceramic analysis. Students work with material from the Lawrence University collections and take part in field research. Units: 6.

Also listed as Environmental Studies 260

Prerequisite: ANTH 110, 120, or 140, preferably all three; non-anthropology majors must obtain consent of the instructor. Recommended for anthropology majors in the sophomore year, must be completed by the end of the junior year.

ANTHROPOLOGY

ANTH 306
Women and Men in Cross-Cultural Perspective
An anthropological approach to the study of gender, the sexual division of labor, marriage, and reproduction. Critical examination of evolutionary, materialist, structuralist, and practice theory approaches to understanding gender behavior and gender stratification. Topics such as transgendered sexuality, reproductive technologies, the anthropology of infancy and parenting address the diversity of ways in which cultures construct sex difference, gender, and sexuality. Units: 6.

Also listed as Gender Studies 350

Prerequisite: ANTH 110 or GEST 100

ANTH 310
Ecological Anthropology
A study of relationships between human communities and their natural environments (*i.e.,* humans studied as members of ecosystems). Topics include the interactions between environment, human biology, and social organization and anthropological perspectives on global environmental problems. Units: 6.

Also listed as Environmental Studies 365

Prerequisite: One anthropology course or consent of instructor

ANTH 320
Archaeology of Gender
An examination of the relationship between gender and material culture. Focus on how gender and gender roles are reflected in the archaeological record and on the problems in identifying and determining gender roles in prehistory. Readings include studies from both the Old and New Worlds and modern theoretical approaches. Units: 6.

Also listed as Gender Studies 351

Prerequisite: One anthropology course or consent of instructor

ANTH 322
Archaeology of North America
An introduction to the ancient peoples of North America from the initial colonists to the peoples who encountered European colonists some 13,000 years later. Special emphasis is given to the ancient inhabitants of the Great Lakes region. Units: 6.

Prerequisite: ANTH 120

ANTHROPOLOGY

ANTH 324
Archaeology of the Prehistoric Aegean
A study of archaeological investigations in the Aegean region — Greece, Crete, the Cycladic Islands, and western Turkey. Emphasis on the evidence of cultural development from Palaeolithic hunter-gatherers and Neolithic farmers and herders through the development of the Bronze Age "palace" civilizations of the Minoans and Mycenaeans. Units: 6.

Also listed as Classics 365

Prerequisite: ANTH 120 or consent of instructor

ANTH 326
Bizarrchaeology
Much of the public's interest in archaeology focuses on "mysteries" of the past or allegedly "unexplainable" phenomena. Since the past is largely impossible to know, it is easy to uncritically fill it with products of the imagination rather than products of ancient peoples. This course examines some of these "imaginary" pasts and the practice of creating them. Units: 6.

Prerequisite: ANTH 120 or consent of instructor

ANTH 330
Language and Culture
An examination of language and other cultural symbolic systems used to formulate and communicate meanings. Attention to social factors in language use, including ethnicity, social class, gender, and the nation-state. Some consideration of the ways that language both reflects and influences people's ways of thinking. Units: 6.

Also listed as Linguistics 330

Prerequisite: One anthropology course or one linguistics course, or consent of instructor.

ANTH 342
Medical Anthropology
A cross-cultural study of health, healing, and beliefs about the body and illness. Particular attention is paid to the cultural construction of medical beliefs and practices (our biomedical model is only one of many possible world views). Units: 6.

Prerequisite: Sophomore standing, and ANTH 110 or 140

ANTH 344
Nutritional Anthropology
This course provides a basic introduction to human nutrition. It then considers the evolution of human nutrition through the study of primate nutrition and the putative diets of human ancestors. Finally, it considers anthropological approaches to understanding cross-cultural, intracultural, and life-cycle variation in modern human nutrition. Units: 6.

Prerequisite: ANTH 140 or consent of instructor

ANTHROPOLOGY

ANTH 345
Distributed Cognition
Distributed cognition explores the role of the environment, artifacts, social interaction, and culture in human reasoning, problem-solving, and learning. Domains of study range from the sophisticated (ship navigation) to the everyday (time-telling). Emphasis is placed on studies of cognition in real-world settings. Units: 6.

Also listed as Education Studies 345, Psychology 345

Prerequisite: Sophomore standing

ANTH 350
Indians of North America
A cultural study of the Indians of North America, including examination of the impact of European ideas and technology on Indian societies. Emphasis on environmental adaptations, levels of social and cultural complexity, problems of historical interpretation, and the methods and theories of ethnology and their applications to North American cultures. Units: 6.

Also listed as Ethnic Studies 330

Prerequisite: ANTH 110

ANTH 358
Ethnography of the Middle East and North Africa
Introduction to the peoples and cultures of the Middle East and North Africa, an area of tremendous cultural, religious, linguistic, and economic diversity. Focus on the nature of ethnography as a research method and key areas of inquiry that have concerned anthropologists working in Arab and Muslim societies. Topics include social organization, tribalism, colonialism, gender, religion, nationalism, ethnic and religious minorities, and the politics of identity. Units: 6.

Also listed as Ethnic Studies 332

Prerequisite: ANTH 110 or consent of instructor

ANTH 360
Anthropology of South Asia
Introduces the complexity of South Asian society and culture through the study of ethnographies of gender, religious life, kinship, social organization, and economy in the colonial and post-colonial periods. Units: 6.

Prerequisite: ANTH 110 or consent of instructor

ANTHROPOLOGY

ANTH 364
Ethnography of East Asia
A critical and comparative examination of key areas of sociocultural change in present-day East Asia. What do we mean when we speak of "tradition" in the East Asian context? Does tradition refer to an imagined past, or to actual practices that have been discarded in response to demographic, economic or political forces? Using ethnographic studies, we will see how society shapes assumed realms of private experience in Japan, China, and South Korea such as gender, identity, work, and the family, and how these realms of private experience are undergoing marked change. We will then address new areas of research in East Asian anthropology such as the body politic, sexuality, pop culture, consumption and national cultural identities. Units: 6.

Also listed as East Asian Studies 364

Prerequisite: ANTH 110 or consent of the instructor

ANTH 366
Ethnography of Japan
Critical examination of social and cultural (re)presentations of Japan from the postwar to the postmodern. Exploration of diversities of lived reality and social change in contemporary Japan. Topics include: nationalism and historical consciousness, family and gender ideologies, invisible and visible others, sexuality, pop culture, and the Heisei recession. Units: 6.

Also listed as East Asian Studies 366

Prerequisite: ANTH 110 or sophomore standing

ANTH 372
Urban Anthropology of London
This seminar combines a variety of methods to explore contemporary British culture. In addition to the readings and field trips, students conduct ethnographic fieldwork in London on a topic of their own interest. This may be based in a particular place or, more broadly, focus on a certain group of people. The course provides an introduction to field research methods. Throughout the term, students participate in shorter exercises designed to develop their confidence in the skills of observation, interviewing, description, and analysis. Readings on topics such as neighborhoods, social use of language, class, education, and migration experience provide a framework for understanding the detail of the individual projects. Students are expected to make presentations and participate in discussions. *Offered at the London Centre.* Units: 6.

Prerequisite: Must be attending the Lawrence London Centre.

ANTH 374
Identity and Place: Diaspora Experience in Comparative Perspective
An exploration of similarities and differences in refugee/diaspora communities. Issues explored include relationships between place and identity, memory and identity, notions of home and homeland, gender and class, assimilation versus resistance, social and cultural changes induced by migration and the impact of transnationalism. Units: 6.

Prerequisite: Sophomore standing and one course in anthropology or consent of instructor

ANTHROPOLOGY

ANTH 450
Senegalese Culture
This course is part of the Lawrence Francophone Seminar in which students study in French-speaking West Africa for ten weeks. Offered in alternate years. Units: 6.

Also listed as French 400

Prerequisite: Must be attending the LU Francophone Seminar

ANTH 470
American Indians on Film
The course examines the ways in which American Indians have been depicted on film. Ethnographic, documentary, and feature films are examined and compared to understand how film has shaped our image of American Indians. Units: 6.

Also listed as Ethnic Studies 430, Film Studies 470

Prerequisite: ANTH 350 or consent of instructor

ANTH 500
Topics in Anthropology
An examination of a particular topic in contemporary anthropology. The specific topic investigated changes each year. Students are expected to carry out independent research on the topic, either through a review of relevant literature or through field or laboratory work.

Topic for Fall 2010: Critical Medical Anthroplogy
An advanced seminar, critical medical anthropology draws from critical theory (Marxism, poststructuralism, deconstructionism) to consider the influence of political-economic inequality on the distribution of disease, and to question fundamental assumptions of Western biomedicine. Subject areas will include: the political economy of health, global health, body politic and body praxis, gender and health. Prerequisites: ANTH 342 or ANTH 200.

Units: 6.
Prerequisite: Junior standing and at least two courses in anthropology or consent of instructor

ANTH 501
Research Questions in Anthropology
An introduction to formulating a research question in anthropology. Students will explore the research literature in an area of interest within anthropology and develop a researchable question grounded in a review of existing theory and empirical research. Graduate training and careers in anthropology will also be discussed. Units: 6.

Prerequisite: ANTH 200, 207, 210, and junior or senior standing

ANTHROPOLOGY

ANTH 502
Ethnographic Writing
An examination of ethnographic writing as a disciplinary, social, and creative practice among anthropologists. Three themes are considered: dominant practices in ethnographic writing (both current and historical), genres and stylistic practices (*e.g.,* journalistic travel writing, poetry, as well as conventional anthropological accounts), and the experience of ethnographic writing (in which students compose their own ethnographies). An ideal course for students writing up summer field/internship reports or planning senior projects. Units: 6.

Prerequisite: Junior standing and at lease two courses in anthropology or consent of instructor.

ANTH 510
Contemporary Debates in Anthropology
A consideration of current debates in anthropology on issues surrounding representation, ethics, research techniques, the nature of culture, and political positions. These issues are examined in relation to previous anthropological theory and current social scientific thought. Units: 6.

Prerequisite: Junior or senior standing and at least two courses in the social sciences

ANTH 512
Fictions of Africa
An exploration of African culture and history through literature and film by African authors/directors. Issues to be explored include African debates on colonialism, post-colonialism, gender, class, and ethnic stratification, religion, modernization and development. Fictional works will be discussed in tandem with ethnographic monographs and critical essays. Units: 6.

Prerequisite: Junior or senior standing and at least two other courses in the social sciences

ANTH 520
Topics in Archaeology
An examination of a particular topic in contemporary archaeological research. The specific topic investigated changes each year. Students are expected to carry out independent research on the topic, either through a review of relevant literature or through field or laboratory work.

Units: 6.

Prerequisite: ANTH 120 and junior standing or consent of instructor

ANTH 540
Topics in Biological Anthropology
An examination of a particular topic in contemporary biological anthropological research. The specific topic investigated changes each year. Students are expected to carry out independent research on the topic, either through a review of relevant literature or through field or laboratory work. Units: 6.

Prerequisite: ANTH 140 and one other course in anthropology; or BIOL 140 and instructor's consent; and junior or senior standing

ANTHROPOLOGY

ANTH 580
Topics in Neuroscience
A study of the nervous system from the perspectives of psychology, biology, and/or biological anthropology. Topics vary year to year and may include glial cells, neural development, and the evolution of nervous systems, and neurotransmitter systems. Lecture only. May be repeated with consent of instructor.

Topic for Winter 2011: Evolutionary Perspectives on Human Brain and Cognition
This course will consider the human brain and human cognition through the analysis of comparative studies of great apes, the fossil record of human brain evolution, evolutionary genetic evidence, and adaptationist approaches. We will seek to develop a critical understanding of recent findings, in the light of past research.

Units: 6.
Also listed as Biology 340, Psychology 580

Prerequisite: CHEM 116 or 119 and either BIOL 140 and one course in psychology, or PSYC 360 and one course in biology, or consent of instructor

ANTH 601
Research Design in Anthropology
An introduction to designing a research project in anthropology. Students will build a conceptual model and design both data collection protocols and analysis strategies that will address the research question they developed in ANTH 501. Seminar meetings will be spent discussing problems and issues raised by individual students' projects. Units: 6.

Prerequisite: ANTH 501 and senior standing or consent of instructor.

ANTH 390, 590, 690
Tutorial Studies in Anthropology
Advanced study of selected topics. Units: Variable.

Prerequisite: Counter Registration Required.

ANTH 191, 391, 591, 691
Directed Study in Anthropology
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

ANTH 195, 395, 595, 695
Internship in Anthropology
Applied work in anthropology arranged and carried out under the direction of an instructor. Units: Variable.

Prerequisite: Counter Registration Required.

ANTHROPOLOGY

ANTH 399, 599, 699
Independent Study in Anthropology
Advanced research. Students considering an honors project should register for this course, for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

ART AND ART HISTORY

Professors: Lawton (Ottilia Buerger Professor of Classical Studies, chair), Orr
Associate professor: Neilson*
Assistant professors: Carlson, Lindemann, Rinehart, Shimon
Instructor: Lewis (Art Gallery)
Lecturer: Clifford
Post-doctoral fellows: Kupinsky, Zimany (Uihlein Fellow of Studio Art)

* On leave Term(s) II

An integral part of a liberal arts curriculum, the courses of the art and art history department encourage aesthetic awareness and appreciation by emphasizing the interdependence of art-making, art history, and other creative and intellectual fields. A major is offered in either studio art or art history, and certification for teaching K-12 is available in conjunction with the studio art major. A student may complete a double major in studio art and art history by fulfilling the requirements for each major. Students planning to major in studio art and/ or art history should take the introductory 100-level courses required for the major in their freshman and sophomore years. Students may take a maximum of 126 units in the art and art history department, provided that no more than 90 are in either studio art or art history.

2010-2011 Course Catalog

Required for the studio art major

1. A minimum of nine studio art courses (54 units) to include:
    - Art 100 and 110
    - One two-dimensional and one three-dimensional course (6 units each) at the 200 level
    - At least four courses (24 units) numbered 300 or above, of which at least one (6 units) must be numbered 500 or above
    - Art 600: *Senior Seminar*
2. A grouping of works in the senior exhibition
3. Two Art History courses (12 units) to include:
    - Art History 100 or 102
    - One Art History course (6 units) with an emphasis on 20th century or contemporary art

Required for the studio art minor

- A minimum of six studio art courses (36 units) to include:
    - Art 100 and 110
    - One course (6 units) numbered 500 or above
    - Three additional courses (18 units)
- C average in the minor

Certification for teaching K-12
Studio art majors may enroll in a program for certification to teach art in grades K-12. Studio art course requirements for certification must be taken in conjunction with or in addition to the

studio art major requirements. The required art courses for certification include Art 200, 240, 250, and 585 and Art History 100 and 102.

It is highly recommended that studio majors planning for certification consider additional courses that expand their knowledge base of media and process. Recommended courses: Art 220, 230, and 270.

Education requirements: Education Studies 180, 340, and 350, and Education Studies 430, 650, and 660.

Student teaching is usually done in a 13th term. For other general regulations governing students seeking certification to teach, please see the Department of Education.

Students intending to complete the program in art certification should declare their intention to their advisor and the director of teacher education as early as possible, preferably before the end of the sophomore year.

***Senior Experience* in Studio Art**
The studio art *Senior Experience* consists of two separate yet complementary components: ART 600 Senior Seminar (usually offered Term II) and participation in the Senior Exhibition, held annually in the Wriston Galleries near the end of Term III.

Both aspects of the studio art *Senior Experience* are intended to be a culmination of the practical and conceptual art-making skills developed through the studio art program. Designed to inform one another, both serve to encourage a more refined awareness and understanding of current issues pertinent to contemporary art along with the applied skills and critical thinking processes necessary for success either in graduate school or as a professional visual artist.

Students pursuing double majors and double degrees are encouraged to consult in advance with the studio art faculty if they are interested in developing a body of work for the senior art exhibition that integrates their interests in both majors.

ART AND ART HISTORY

Studio Art Courses

ART 100
Introduction to Studio Art
An introduction to studio art and the fundamental principles of design. Projects, lectures, readings, class discussions, and critiques examine elements of two-dimensional, three-dimensional and time-based design. Historic and contemporary approaches are considered as well as the evolution of technology and the continuum of visual expression. Emphasis is placed on developing the practical and critical thinking skills required in art-making. Units: 6.

ART 110
Introduction to Drawing
An introduction to drawing, emphasizing the development of the observational and critical thinking skills important to art-making. Class work is based on exercises that strengthen visual research capabilities, drawing abilities, and mark-making techniques with a variety of tools. Assigned projects address fundamental technical and conceptual problems suggested by historical and contemporary artistic practice. Lectures, readings, discussions, guest speakers, field trips, and critiques explore elements of concept and design pertinent to drawing as a medium. Units: 6.

Prerequisite: Counter Registration Required.

ART 200
Painting
An introduction to painting as a means of visual expression. Topics include technical and formal principles of painting with an emphasis on conceptual development. Water-based mediums are used to explore color theory, color mixing, brushwork and styling, image surface, composition, and visual communication. Mixed media and experimentation of materials is encouraged to expand beyond traditional painting practices. Units: 6.

Prerequisite: ART 100 or 110

ART 210
Drawing
Exploration of drawing as a contemporary art medium. Emphasis on self-expression and conceptual development. Students will be encouraged to concentrate on the more complex personal and creative aspects of mark-making and pursue a cohesive body of work. Incorporation of mixed media and experimental elements is encouraged for those students who wish to expand the boundaries of traditional drawing media and processes. Units: 6.

Prerequisite: ART 100 or ART 110

ART AND ART HISTORY

ART 220
Printmaking
An introduction to basic printmaking including two or more of the following techniques; intaglio, relief, lithography, silk screen, papermaking and bookbinding. There is an emphasis on conceptual development and contemporary practices in printmaking. Single and multiple color printing techniques, formal issues as well as printmaking as a form of visual expression are explored in detail. Units: 6.

Prerequisite: ART 100 or ART 110

ART 230
Photography
An introduction to traditional black-and-white film photography. Pinhole, 35mm, medium-format, and view camera techniques are covered, along with darkroom instruction on processing film and making silver gelatin prints. Historic and contemporary ideas about photography as a medium are examined in readings, lectures, visiting artist presentations, critiques, demonstrations, and assigned projects. Units: 6. Prerequisite: ART 100 or 110

ART 240
Digital Processes
An introduction to the digital medium focusing on its capacity to convey artistic concepts through the interactive and multimedia capabilities of the Mac computer. Producing still image, video, and web-based projects using the computer screen as a venue are covered. The evolution of technology, new media theory, contemporary art discourse, and visual culture are explored through lectures, readings, discussions, and assignments. Units: 6.

Also listed as Film Studies 240

Prerequisite: ART 100 or ART 110

ART 245
InterArts: New Media Projects
The digital medium will be used to explore the relationship between art and knowledge. Lectures, discussions, readings and critiques will investigate contemporary art practices, interdisciplinary and the documentary form. Conceptual-development, planning and production will be covered as students work individually or collaboratively on video, performance, installation and web projects. Units: 6.

Prerequisite: Junior standing and consent of the instructor.

ART 250
Ceramics
An introduction to the basic working methods of ceramics, including hand-building, mold-making, and wheel-throwing. Emphasis will be placed on conceptual development, sensitivity to three-dimensional form, and technical skills of surface and glazing. Slide lectures, readings, and individual research treat historical and contemporary approaches to expressive work in the ceramic medium. Units: 6.

Prerequisite: ART 100 or 110

ART 255
Special Topics in Ceramics: Asian Craft and Design
A combination of research and studio practice. Through slide lectures, readings, and discussions, this course will survey the historical development of traditional through contemporary crafts and design in China, Korea, and Japan and focus on the diverse craft customs of Japan in particular. Emphasis will be placed on independent research to develop ideas and critical thinking and on building a variety of ceramic skills to achieve a personal body of work. Units: 6.

Also listed as East Asian Studies 255

Prerequisite: ART 100 or ART 110; ARHI 175 recommended

ART 270
Sculpture
An introduction to the concepts and processes of sculpture, including work in casting, carving, woodworking, assemblage, and mold-making. Discussions will focus on contemporary sculpture and technical/conceptual development. Units: 6.

Prerequisite: ART 100 or 110

ART 300
Intermediate Painting
A continuation of ART 200, exploring more complex principles of visual expression. Emphasis on oil-based painting techniques, historic and contemporary practices, pictorial structure, formal and theoretical interactions with a strong focus on conceptual development. Units: 6.

Prerequisite: ART 200

ART 320
Intermediate Printmaking
A continuation of ART 220, exploring traditional and contemporary techniques in printmaking, with an emphasis on color and combination printing specific to the aesthetic characteristics of each process. Two or more of the following techniques are used to enhance the conceptual and visual narrative inherent to this graphic medium, including; intaglio, relief, lithography, silk screen, papermaking, bookbinding, and alternative processes. Units: 6.

Prerequisite: ART 220

ART 330
Intermediate Photography
A continuation of ART 230 with an emphasis on the view camera and expanded darkroom instruction covering early photographic printing processes. Lectures, readings, discussions, and projects focus around contemporary issues, technical progress, and conceptual exploration. Historic ideas and contemporary issues related to visual culture, photography, and photographic methods are examined. Units: 6.

Prerequisite: ART 230

ART AND ART HISTORY

ART 340
Intermediate Digital Processes
A continuation of Art 240 or 245 with an emphasis on the production of art objects through the use of digital tools. The Mac computer and software are used as an extension of existing art forms such as photography, filmmaking, and book publishing. Lectures, readings, discussions, and assignments focus around the exploration of new media theory and contemporary art issues. Units: 6.

Also listed as Film Studies 340

Prerequisite: ART 240 or ART 245

ART 350
Intermediate Ceramics
A continuation of hand-building techniques, wheel-throwing, and mold-making with additional research into glaze formulation and alternative firing methods. Emphasis will be placed on development of content and a personal vocabulary. An expanded survey, artist research, and critical readings will examine ceramics as a form of contemporary visual expression. Units: 6.

Prerequisite: ART 250 or ART 255

ART 370
Intermediate Sculpture
A continuation of the concepts and techniques introduced in ART 270, with emphasis on students' development of a personal visual language. Materials and processes covered include: mold-making, casting, metal fabrication, plastics, woodworking, and mixed media. Areas of examination include site-specific art, public sculpture, multiples and installation. Units: 6.

Prerequisite: ART 270

ART 500
Advanced Painting
A continuation of ART 300. Advanced research into the technical, formal, conceptual, and theoretical approach to painting as an expressive art form. The emphasis is for each student to produce a self-designed project that focuses on creating a cohesive body of work. Units: 6.

Prerequisite: ART 300 and consent of instructor

ART 501
Junior Studio Art Practicum
The primary purpose of this course is to assist in the research, planning, design, and preparatory development of junior level studio art majors as they begin the process of conceptualizing and creating a mature body of work for the senior exhibition and/or honors projects. This course will be taught as a seminar with studio component. Units: 6.

Prerequisite: Any 300-level studio art course.

ART AND ART HISTORY

ART 520
Advanced Printmaking
A continuation of ART 320, exploring advanced research into combination printmaking techniques, with exploration of formal, theoretical, and technical issues related to printmaking as an expressive art form. Alternative and experimental processes are used to further develop the conceptual and visual narrative. The emphasis is for each student to produce a self-designed project that focuses on creating a cohesive body of work. Units: 6.

Prerequisite: ART 320 and consent of instructor

ART 530
Advanced Photography
A continuation of Art 330. Advanced work in traditional film photography techniques and contemporary art theory. Discussions, readings and projects focus around art issues and conceptual exploration. Project planning and implementation are emphasized as students work toward producing a self-designed project with a developed artist statement. Units: 6.

Prerequisite: ART 330 and consent of instructor

ART 540
Advanced Digital Processes
A continuation of Art 340. Advanced work in digital techniques and contemporary art theory. Discussions, readings and projects focus around art issues and conceptual exploration. Project planning and implementation are emphasized as students work toward producing a self-designed project with a developed artist statement. Units: 6.

Also listed as Film Studies 540

Prerequisite: ART 340 and consent of instructor

ART 550
Advanced Ceramics
A continuation of Art 350. Students conduct individual work on a topic related to contemporary ceramic practice, while expanding technical skills and addressing issues in current ceramic criticism. Project planning and implementation are emphasized to develop a cohesive body of work. Units: 6.

Prerequisite: ART 350 and consent of instructor

ART 570
Advanced Sculpture
A more refined continuation of the ideas, issues and skills addressed in ART 370. Individualized project planning and implementation are emphasized as students develop a unique and consistent body of work. Units: 6.

Prerequisite: ART 370 and consent of instructor

ART AND ART HISTORY

ART 585
Art in the Elementary and Secondary Schools
Art class observations, studio practice in both two- and three-dimensional disciplines, studio demonstrations/lectures, and selected readings and discussions relative to the visual expression of the elementary, junior, and senior high school student. Units: 6.

Also listed as Education 585

Prerequisite: Four studio art courses, EDUC 180 and 340, and two art history courses

ART 600
Studio Art Senior Seminar
Intended to serve as a capstone experience for students in studio art, this course is designed to complement and work in conjunction with the student's preparations for the Senior Exhibition. It will cover the practical concerns relevant to working as a professional artist along with current issues pertinent to the contemporary art world. Units: 6.

Prerequisite: Senior standing and declared major in Studio Art or consent of the instructor

ART 601
Advanced Studio Art Practicum
The primary purpose of this course is to galvanize and standardize our majors' preparations for the senior exhibition departmental requirement. By immersing the student in creating and exhibiting an advanced, major body of work with greater faculty oversight coupled with more formalized peer input, we expect to strengthen our students' synthesizing of information, ideas, and conceptual concerns accumulated over the course of their studio art education. Secondary concerns are reflection, assessment and documentation of work produced. This course will be taught as a seminar with a studio component. Units: 6.

Prerequisite: Any 500-level studio art course.

ART 390, 590, 690
Tutorial in Studio Art
Offered for intermediate and advanced study in studio art. Apply to the instructor at least one term in advance with written proposal and a preliminary bibliography. Units: Variable.

Prerequisite: Counter Registration Required.

ART 191, 391, 591, 691
Directed Study in Studio Art
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

ART AND ART HISTORY

ART 195, 395, 595, 695
Internship in Studio Art
The internship will provide an experience-based learning opportunity to enrich the student's artistic process and growth. It will encourage innovation and resourcefulness while facilitating an entrepreneurial and informed approach to future creative pursuits. Students should expect to gain "real world" experience and professional connections as well as skills and insights they can apply directly to their creative projects in the classroom and beyond. Students will work on an individual basis with a faculty supervisor, and internship site supervisor, and the Career Center to design, implement and evaluate their academic experience. Units: Variable.
Prerequisite: Counter Registration Required.

ART 399, 599, 699
Independent Study in Studio Art
Advanced studio art for students preparing for the senior exhibition or doing honors projects. Units: Variable.

Prerequisite: Counter Registration Required.

2010-2011 Course Catalog

Required for the art history major

1. A minimum of 10 art history courses (60 units) to include:
    - Art History 100 and 102
    - One 200- or 300-level course (6 units each) in each of the following periods:
        - Ancient
        - Medieval and Renaissance
        - Modern and Contemporary
    - One 400 level course (6 units)
    - Art History 660
    - Art History 680
    - Two Additional Art History courses (12 units)
2. One course in studio art (6 units)

Required for the art history minor

1. A minimum of six art history courses (36 units) to include:
    - Art History 100 and 102
    - Three courses at the 200 or 300 level (6 units each) to be taken from at least two of the following periods:
        - Ancient
        - Medieval and Renaissance
        - Modern and Contemporary
    - One 400-level course (6 units)
2. C average in the minor

ART AND ART HISTORY

Recommendations
Art history majors are urged to coordinate with their studies participation in one of Lawrence's international off-campus programs or the program at the Newberry Library in Chicago.

Art history majors, particularly those considering graduate studies, are strongly encouraged to begin the study of German and/or French in the freshman or sophomore year.

***Senior Experience* in Art History**
The art history *Senior Experience* consists of two 600-level courses: ARHI 660: The Methods of Art History and ARHI 680: *Senior Seminar*. ARHI 680 may be taken during the junior or senior year and serves as the prerequisite for ARHI 680, taken during the senior year. Students pursuing double majors and double degrees are encouraged to consult in advance with the art history faculty if they are interested in pursuing a research topic in ARHI 680 that integrates their interests in both majors.

Art History Courses

ARHI 100
Survey of Western Art I: Ancient to Medieval
An introductory survey of the art and architecture of the ancient Near East and of Europe from the Prehistoric through the Gothic periods and an introduction to methods of viewing art in its historical and cultural context. Units: 6.

ARHI 102
Survey of Western Art II: Renaissance to Modern
An introductory survey of the art and architecture of Europe and North America from the Renaissance to the Modern era. Particular emphasis on viewing works of art and architecture within their historical and cultural context. Units: 6.

ARHI 175
Introduction to the Arts of China and Japan
An introductory survey of the traditional arts of China and Japan from prehistoric times until the beginning of the modern era. The course will examine representative examples of painting, sculpture, architecture, garden designs, and the decorative arts in the context of religious practices and historical developments. Units: 6.

Also listed as East Asian Studies 175

ARHI 200
Archaic and Classical Greek Art
A study of Greek art and architecture to the end of the fourth century B.C. Topics include the great sanctuaries at Olympia, Delphi, and Athens; the development of mythological narrative in sculpture and vase painting; the political and propagandistic function of Greek art; and the beginning of portraiture. Units: 6.

Also listed as Classics 340

Prerequisite: ARHI 100 or sophomore standing

ART AND ART HISTORY

ARHI 202
From Alexander to Kleopatra: Art of the Hellenistic Age
A study of Greek and Greek-influenced art from the time of Alexander the Great to the Roman conquest of Egypt in 31 B.C. Topics include portraiture and the royal iconography of the Hellenistic rulers, the development of regional styles in sculpture, and the influence of the Romans as patrons. Units: 6.

Also listed as Classics 345

Prerequisite: ARHI 100 or sophomore standing

ARHI 204
Roman Art
A study of the art and architecture of the Etruscans and the Romans to the end of the Roman empire. Topics include the funerary arts of the Etruscans, the art and archaeology of Pompeii and Herculaneum, developments in imperial portraiture and historical relief, technological innovations in architecture, and the beginnings of Christian art. Units: 6.

Also listed as Classics 350

Prerequisite: ARHI 100 or sophomore standing

ARHI 210
Early Medieval Art and Architecture
A survey of art and architecture in Europe and the eastern Mediterranean between the fourth and ninth centuries. Topics include Imperial-sponsored Christian art, the development of Byzantine art and architecture, the Celtic artistic tradition of northern Europe, and the flowering of art under the Carolingian emperors. Units: 6.

Prerequisite: ARHI 100 or sophomore standing

ARHI 212
Later Medieval Art and Architecture
A survey of art and architecture in western Europe during the Romanesque and Gothic periods. Topics include the art of the Pilgrimage Roads, the role of the monastic orders, regional styles, the birth of the Gothic style under the patronage of Abbot Suger, and the High Gothic cathedral. Units: 6.

Prerequisite: ARHI 100 or sophomore standing

ARHI 220
Art of the Italian Renaissance
A study of the art and architecture of Italy from the late 13th century until the early 16th century. Topics include patronage and the art market, the revival and influence of the antique, theories of perspective and design, and changes in the status of the artist. Units: 6.

Prerequisite: ARHI 102 or sophomore standing

ART AND ART HISTORY

ARHI 222
Northern Renaissance Art
A study of the art of northern Europe during the 15th and 16th centuries. Issues addressed include changing attitudes toward naturalism, the development of portraiture, the impact of the new media of oil painting and printmaking, and the evolution of landscape painting. Units: 6.

Prerequisite: ARHI 102 or sophomore standing

ARHI 240
19th Century Art: From Romanticism to Post-Impressionism
A study of the development of 19th-century European art that traces the emergence of movements such as Romanticism, Realism, and Impressionism. Readings and class discussion consider the impact of political instability, industrialization, imperialism, and the growth of popular culture on the production, style, and presentation of painting and sculpture. Units: 6.

Prerequisite: ARHI 102 or sophomore standing

ARHI 242
Modern Art: 1900-1960
A study of 20th-century European and American art that traces the emergence of movements such as Cubism, Surrealism, and Abstract Expressionism. The shifting meanings of art, artistic production, and the definition of the term “artist” are considered against the massive political and social changes of the 20th century. Units: 6.

Prerequisite: ARHI 102 or sophomore standing

ARHI 244
American Art
An examination of American art, 1776-1940. This course considers the growth of landscape, genre, and history painting, as well as portraiture, in the context of changing ideas about nationalism, class, race, and gender. Architecture and sculpture are also discussed in terms of how visual culture shaped early ideas about nationhood. Units: 6.

Prerequisite: ARHI 102 or sophomore standing

ARHI 246
19th-Century Art, Design, and Society in Britain
In the 19th century, Britain was at the height of her imperial and industrial powers, with a burgeoning middle class with increased spending power. Against this background, this course examines the painting (including Turner, Constable, the Pre-Raphaelites, the High Victorians), architecture, furniture, and interiors of the period, utilizing the wealth of examples in London’s museums, galleries, and buildings. *Offered at the London Centre.* Units: 6.

Prerequisite: Must be attending the Lawrence London Centre.

ART AND ART HISTORY

ARHI 250
History of Photography
An examination of the development and history of photography, through a study of its processes, practitioners, and photography-related criticism and theory. Topics include the collusion of art and science, the cultural impact of photography, photography's role in fine art practice, and the possibilities and limits of “photographic” truth. Units: 6.

Prerequisite: ARHI 102

ARHI 270
Latin American Visual Art (in English)
The course introduces the cultures of Latin America through a survey of its major movements and artists from the early 19th century to the present. Image-based lectures will be accompanied by discussion of visual and thematically related texts (*i.e.,* biographies, letters, scholarly articles) and carefully selected fragments of videos. Taught in English. Units: 6.

Also listed as Spanish 575

ARHI 271
Latin American Visual Art
The course introduces the cultures of Latin America through a survey of its major movements and artists from the early 19th century to the present. Image-based lectures will be accompanied by discussion of visual and thematically related texts (*i.e.,* biographies, letters, scholarly articles) and carefully selected fragments of videos. Taught in Spanish. Units: 6.

Also listed as Spanish 576

Prerequisite: One 400-level Spanish course, its equivalent, or consent of the instructor

ARHI 320
Contemporary Art
A study of art since 1960. Students will study art works and the theories and strategies that have informed their production. Topics include: the impact of gender and ethnicity, new materials and processes, site-specific and time-based works, and alternative venues and approaches toward exhibition. Units: 6.

Prerequisite: ARHI 242

ART AND ART HISTORY

ARHI 400
Topics in Ancient Art
An examination of a particular topic in ancient art history. Students are expected to carry out independent research. The topic will change periodically. Course may be repeated with the consent of the instructor.

Topic for Winter 2011: Women in Classical Antiquity This course examines the roles of women in ancient Greek, Hellenistic, and Roman societies, using historical, literary, art historical, and archaeological sources. Topics will include these cultures' constructions of gender and the ways in which they affected the relationship of women (and men) to social, religious, political, economic, and legal institutions.

Units: 6.
Also listed as Gender Studies 215, Classics 540

Prerequisite: One course in ancient art, one course in Classics, or consent of the instructor.

ARHI 420
Topics in Medieval and Renaissance Art
An examination of a particular topic in medieval or Renaissance art history. The topic will change periodically. Course may be repeated with the consent of the instructor. Students are expected to carry out an independent research project that will serve as preparation for ARHI 680.

Topic for Spring 2011: The Illuminated Book in the Later Middle Ages A study of the decorated, handmade book in Western Europe, c. 1300 to c. 1500. Topics include the techniques of writing and illuminating, the decorative programs of different types of books, changing relationships between text and image, the role of the patron, and the function of the book.

Units: 6.
Prerequisite: One course in medieval or Renaissance art history or consent of the instructor

ARHI 440
Topics in Modern and Contemporary Art
An examination of a particular topic in modern or contemporary art history. Students are expected to carry out independent research. The topic will change periodically. Course may be repeated with the consent of the instructor. Students are expected to carry out an independent research project that will serve as preparation for ARHI 680.

Topic for Winter 2011: Art Nouveau This seminar examines the Art Nouveau design movement in Europe and the U.S. at the turn of the 19th century with innovations in architecture, decorative arts and graphics. Topics will include the rise of industrialization, the advent of mass consumer society, the "New Woman" and the Symbolist movement.

Units: 6.
Prerequisite: One 200- or 300-level art history course

ART AND ART HISTORY

ARHI 580
Internship in Art Museum Practice
Applied work in all aspects of art museum practice. Students will receive practical training, hands-on experience, and periodic lectures on the role of art museums and issues relating to museum governance, promotion, and education. Assessment will be based on weekly project performance, an end-of-term virtual exhibition, and a short paper. Units: 6.

Prerequisite: Junior standing, major in art, art history or anthropology, ARHI 100 or ARHI 102; and at least one 200 or 300 level ARHI course

ARHI 660
Methods of Art History
This course will examine the theories and methods practiced in art history. It will concentrate on key texts, from antiquity to the present, relating to the history and criticism of art and visual culture. Readings will include authors and texts that have come to define the discipline, and more recent authors who have begun to challenge those defining texts. Units: 6.

Prerequisite: Junior standing and three courses in ARHI numbered 200 or above, or consent of instructor

ARHI 680
Senior Research Seminar
A senior seminar in which students will conduct research on a topic of their choice and produce a substantive original paper in which they demonstrate their ability to comprehend the scholarly literature on the topic, to subject it to appropriate methods of analysis, and to present the results in well-written and professionally documented form. Open to majors who, having completed a 400-level art history course, have previously investigated a research topic that will serve as the foundation for their work in this course. Units: 6.

Prerequisite: Senior standing, ARHI 660, and one 400-level art history course or consent of the instructor

ARHI 390, 590, 690
Tutorial Studies in Art History
Tutorials for advanced students in art history. Apply to the instructor at least one term in advance with a written proposal and a preliminary bibliography. Units: Variable.

Prerequisite: Counter Registration Required.

ARHI 191, 391, 591, 691
Directed Study in Art History
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

ART AND ART HISTORY

ARHI 595

Units: Variable.

ARHI 399, 599, 699
Independent Study in Art History
Advanced study for students doing honors projects in art history. Units: Variable.

Prerequisite: Counter Registration Required

BIOCHEMISTRY

Faculty Advisors: Debbert (chemistry), E. De Stasio (biology), Dickson (chemistry), Hall (chemistry), Martin (physics), Peck* (biology, chair)

Biochemistry is the study of biological phenomena at the molecular level. Specifically, the scientific principles explored in chemistry and physics are related to the biology of organisms or communities of organisms. Although scientists have been fascinated with the molecules that compose living organisms for more than 200 years, biochemistry was finally recognized as a discipline at the beginning of the 20th century, as scientists strove to understand nutrition and metabolism in the context of human disease. Modern biochemistry is a vast subject that has applications to medicine, dentistry, agriculture, forensics, toxicology, pharmacy, anthropology, environmental science, and other fields.

Biochemistry is a dynamic and highly technical field. A degree in biochemistry presents students with many options for careers or advanced study. The biochemistry major will prepare students for graduate study in biochemistry (or allied fields such as bacteriology, genetics, or oncology) as well as for many pre-professional programs of study.

The biochemistry curriculum includes a strong foundation in the basic sciences, core courses central to the field, and electives that enable students to explore aspects of biochemistry in sub-fields of their choice. Most courses include an intensive laboratory experience, supported by equipment in biology, chemistry, and physics. Experimental work becomes progressively more sophisticated and creative in advanced courses as students gain insight to the primary literature and cutting-edge laboratory techniques. Students are strongly encouraged to engage in summer research, either in an academic setting — at Lawrence or another institution — or in industry.

The vision of a biochemistry *Senior Experience* is best described by a report by the Association of American Colleges and Universities (AAC&U), Greater Expectations: A New Vision for Learning as a Nation Goes to College. A biochemistry major at graduation should be an "intentional learner who can adapt to new environments, integrate knowledge from different sources, and continue learning throughout their life. They should also become empowered learners through the mastery of intellectual and practical skills by learning to effectively communicate orally, and in writing; understand and employ quantitative and qualitative analysis to solve problems; interpret and evaluate information from a variety of sources; understand and work within complex systems; demonstrate intellectual agility and the ability to manage change; transform information into knowledge and knowledge into judgment and action."

The biochemistry major is highly compatible and complementary with the neuroscience program and a number of minors including Biology, Biomedical Ethics, Chemistry, Environmental Studies, and Computer Science. This flexibility allows a student in the major to consider and prepare for a multitude of career options.

BIOCHEMISTRY

2010-2011 Course Catalog

Required for the Biochemistry Major

Required Foundation Courses

1. CHEM 116 (Principles of Chemistry)
2. CHEM 250 (Organic Chemistry I)
3. BIOL 110 (Integrative Biology: Principles)
4. MATH 120 and 130 (Applied Calculus I and II) or MATH 140 (Calculus I)
5. BIOL 280 (Experimental Design and Analysis) or MATH 107 or MATH 117 (Elementary Statistics) or MATH 207 (Introduction to Probability and Statistics).
6. PHYS 141 (Principles of Classical Physics) and 151 (Principles of Modern Physics).
7. *Senior Experience* Courses (Please see description in the respective portions of the course catalog):
    a. CHEM 380 (1 unit S/U)
    b. CHEM 480 (2 units S/U)
    c. CHEM 680 (3 units S/U)

    -OR-

    d. The biology *Senior Experience*. This *Senior Experience* will include two new courses. Additional information will be added upon approval of the Biology *Senior Experience* and the determination of course numbers.

Required Core Courses

1. BIOL 354 Molecular Biology
2. CHEM 340 Biochemistry I (also BIOL 444)
3. CHEM 440 Biochemistry II
4. *Elective Courses* (Students must choose three courses from the list below, including at least one CHEM and one BIOL. One of the three must be a laboratory class)
    - Biology courses:
        - BIOL 235 Evolutionary Biology
        - BIOL 241 Cell Physiology
        - BIOL 300 Immunology
        - BIOL 326 Microbiology
        - BIOL 340 Topics in Neuroscience (also PSYC 580)
        - BIOL 356 Bioinformatics
        - BIOL 453 Developmental Biology
        - BIOL 510 Modern Concepts of Embryogenesis
        - BIOL 520 Cancer Biology
    - Chemistry courses:
        - CHEM 210 Analytical Chemistry
        - CHEM 247 Elements of Life
        - CHEM 252 Organic Chemistry II
        - CHEM 320 Inorganic Chemistry
        - CHEM 370 Chemical Dynamics
        - CHEM 410 Instrumental Analysis
        - CHEM 445: Biochemistry of Viruses
        - CHEM 450 Topics in Advanced Organic Chemistry

- Other:
  - PSYC 350 Psychopharmacology and Behavior

Courses

BIOL 235
Evolutionary Biology
A study of biological evolution, including natural selection, adaptation, the evolution of sex, speciation, extinction, and constraints on evolutionary change. Readings include classic and current literature. Two lectures and one discussion per week. Units: 6.

Also listed as Environmental Studies 213

Prerequisite: BIOL 120, BIOL 140, ANTH 140 or consent of instructor

BIOL 241
Cell Physiology
The structure and organization of the eukaryotic cell are described and employed to understand functional interrelationships at the organelle and molecular levels. Major processes considered include external environmental control mechanisms, developmental events, the regulation of energy exchange, and membrane function. Lecture only. Units: 6.

Prerequisite: BIOL 110

BIOL 300
Immunology
This course will cover the basic concepts of immunology, including differentiation of immune cells, antibody structure and diversity, antigen-antibody reactions, the major-histocompatibility complex, the complement system, immune responses to pathogens, allergies and auto-immune diseases, and comparative immunology. The course will also examine recent advances in the field through current peer-reviewed publications. The weekly laboratory will examine the basic questions, experimental subjects, and procedures of the field. Units: 6.

Prerequisite: Junior standing or permission of instructor.

BIOL 326
Microbiology
A study of microbial life with an emphasis on prokaryotes. Microbial physiology is examined in the context of how unique characteristics allow microbes to exploit a vast diversity of environments, including the human body. Laboratory exercises introduce students to techniques used to safely study microorganisms. Units: 6.

Prerequisite: BIOL 110 and CHEM 116 or concurrent enrollment

BIOL 340
Topics in Neuroscience
A study of the nervous system from the perspectives of psychology, biology, and/or biological anthropology. Topics vary year to year and may include glial cells, neural development, and the evolution of nervous systems and neurotransmitter systems. Lecture only. May be repeated with consent of instructor.

BIOCHEMISTRY

Topic for Winter 2011: Evolutionary Perspectives on Human Brain and Cognition
This course will consider the human brain and human cognition through the analysis of comparative studies of great apes, the fossil record of human brain evolution, evolutionary genetic evidence, and adaptationist approaches. We will seek to develop a critical understanding of recent findings, in the light of past research.

Units: 6.
Also listed as Psychology 580, Anthropology 580

Prerequisite: CHEM 116 or 119 and either BIOL 140 and one course in psychology, or PSYC 360 and one course in biology, or consent of instructor

BIOL 356
Genomics
An overview of the recently emerged field of bioinformatics. Classes will include lectures and computer practicals. Topics covered will include: genome projects, DNA and protein sequence analysis, multiple sequence alignments, searching biological databases, protein structure prediction, transcriptomes and proteomes, and microarrays. Units: 6.

Prerequisite: One of BIOL 260, BIOL 351, BIOL 354, BIOL 444, or CHEM 340

BIOL 453
Developmental Biology
An experimental approach to animal development with laboratory and lecture emphasis on the molecular and cellular level. Includes discussions of pattern formation, differentiation, cell interactions, gametogenesis, fertilization, and early embryogenesis. Lecture and laboratory. Units: 6.

Prerequisite: BIOL 140; concurrent enrollment in or completion of one of the following: BIOL 241, 444 (or CHEM 340), 351 or 354

BIOL 460
Advanced Research in Biomolecular Chemistry
A formal introduction to advanced research and techniques in biochemistry. Students will go through the process of developing an independent research project from analyzing scientific literature to conducting experiments. Results and data analysis will be disseminated in the form of oral or written reports. Units: 6.

Also listed as Chemistry 442

Prerequisite: CHEM 340 or BIOL 354, and consent of instructor

BIOL 510
Modern Concepts of Embryogenesis
A broad-based study of recent advances in the field of developmental biology. Critical review of current literature on genetic, molecular, and functional studies elucidating the underlying mechanisms of embryogenesis. Units: 6.

Prerequisite: BIOL 241, 444, 351, or 354

BIOCHEMISTRY

BIOL 520
Cancer Biology
An advanced seminar covering key areas of cancer biology, including epidemiology, molecular diagnostics, mechanisms of carcinogenesis, and current treatments. Students will undertake critical review of current literature in these fields and will have input into course content. Units: 6.

Prerequisite: BIOL 241 or BIOL 260 or BIOL 354 or BIOL 444

CHEM 210
Analytical Chemistry
A course in the fundamental principles of quantitative analysis, stressing both chemical and instrumental techniques. Emphasis on application of analytical chemistry to practical problems, including environmental issues, food science, biochemical systems, and industrial processes. Opportunities for individually designed projects. Lectures and two laboratories per week. Units: 6.

Also listed as Environmental Studies 250

Prerequisite: CHEM 116 or 119 or consent of instructor

CHEM 247
The Elements of Life
A seminar that introduces the biological chemistry of some 20 elements, mostly “inorganic,” that living systems incorporate and require, touching upon the topics of uptake, selectivity, compartmentalization, control, energetics, catalysis, structure, and toxicity. Students will draw from the text to elucidate in class the biological roles of individual elements. No laboratory. Units: 6.

Also listed as Environmental Studies 247

Prerequisite: CHEM 116 or 119 or consent of instructor

CHEM 252
Organic Chemistry II
A continuation of the study of carbon compounds, including additional functional groups and polyfunctional compounds. One four-hour laboratory per week, directed toward more advanced synthetic and analytic problems. Units: 6.

Prerequisite: CHEM 250

CHEM 270
Biophysical Chemistry
A study of the physical processes involved in living systems including thermodynamics and equilibria, kinetics and transport phenomena, and applications of quantum chemistry and spectroscopy. Units: 6.

Prerequisite: CHEM 116, MATH 140 (or MATH 120 and MATH 130), and PHYS 130 or PHYS 160

BIOCHEMISTRY

CHEM 320
Inorganic Chemistry
A survey of structures, properties, reactivities, and interrelationships of chemical elements and their compounds. Topics include unifying principles and concepts that enable the interpretation of experimental data associated with materials. Emphasis on multidisciplinary aspects of inorganic chemistry. Lectures and weekly laboratory. Laboratory projects involve synthesis and studies of compounds using a variety of experimental methods. Units: 6.

Prerequisite: CHEM 116 or 119 or consent of instructor

CHEM 370
Chemical Dynamics
Develops and explores theoretical descriptions of chemical systems: physical states, the laws of thermodynamics as applied to chemical and physical equilibria, chemical reaction kinetics, and spectroscopy. No laboratory. Units: 6.

Prerequisite: MATH 120 or 140; one of the following courses: PHYS 120, PHYS 150, CHEM 210, or CHEM 270; or consent of instructor

CHEM 410
Instrumental Analysis
An advanced course in instrumental methods of compound identification and analysis. Emphasis divided between instrument design and operating principles and interpretation of instrumental data. Discussion of spectroscopic, chromatographic, and electrochemical techniques. Illustrative experiments drawn from various fields of chemistry, with an emphasis on natural systems and environmental issues. One laboratory per week. Lectures and weekly laboratory. Units: 6.

Prerequisite: CHEM 210, 252, and 370 or consent of instructor

CHEM 450
Topics in Advanced Organic Chemistry
A study of modern topics in organic chemistry, emphasizing current literature. Topics vary year to year and may include organic structure, reaction mechanisms, and synthetic methods. No formal laboratory; lab exercises may occasionally substitute for lectures. Units: 6.

Prerequisite: CHEM 252 and 370 or consent of instructor

PHYS 500
Special Topics in Physics
Treats selected topics, such as relativity, fundamental particles, fluid mechanics, and surface physics that vary according to the interests of students and staff. Units: 6.

PSYC 350
Psychopharmacology and Behavior
An interdisciplinary examination of the ways in which behaviorally active drugs exert their effects, drawing on research in pharmacology, psychology, biochemistry, anatomy, and neurophysiology. Provides an understanding and appreciation of the role of behaviorally active drugs in people's lives, today and in the past. Units: 6. Prerequisite: Sophomore standing

BIOLOGY

Professors: B. De Stasio, E. De Stasio (The Raymond H. Herzog Professorship in Science, chair), Maravolo, Perreault, Rence
Associate professors: Sedlock, Wall
Assistant professors: Dickson (Chemistry), Humphries, Peck
Visiting assistant professor: Emerson
Lecturer: Duckert
Post-doctoral fellow: Piasecki

Students come to Lawrence with varied interests in the life sciences. A pre-medical or pre-dental student may want preparation an oceanographer or forester does not need. A botanist is more excited about some experimental techniques than is a zoologist. Ecologists look at problems that a molecular biologist or a neurobiologist would find less appealing. One individual may wish to be specialized, another to be a generalist with a broader background. To accommodate this heterogeneity, the biology department has designed its program to provide as much flexibility as possible.

Philosophically, the department encourages an open-ended, original, experimental approach to life science. Beyond the introductory sequences in biology and chemistry, there is no prescribed program for students. This approach begins in Biology 110: *Principles of Biology*, in which all department faculty members participate. Students design, conduct, and interpret their own projects and present their results at a mock professional meeting at the end of the term.

Experimental work becomes progressively more sophisticated and creative in advanced courses. All courses are designed to develop students' insights and capacity to synthesize information through lectures, discussions, readings, field trips, and seminars in those areas most closely related to the competence of the faculty. Most courses feature intensive laboratory instruction where students use advanced research equipment and computer facilities to explore modern biological concepts.

All biology faculty members conduct active research programs and have employed students during the summer as assistants.

Recent advances in biological research are presented in a series of talks by faculty and by scientists from other universities.

Many students culminate their work in biology with significant original research. In recent years, several papers with students and faculty as co-authors have been published in professional journals. Topics have included aquatic food chain energetics, physiology of aging, age effects on insect reproduction, and molecular mechanics of vertebrate development.

Students who have strong secondary interests in chemistry, geology, or physics may construct majors involving biology and one of the other three natural sciences, using the interdisciplinary major in the natural sciences (see natural science website).

BIOLOGY

2010-2011 Course Catalog

Required for the biology major

1. Biology 110, 120, and 140
2. Chemistry 115 and 116
3. At least seven six-unit courses in biology numbered 200 or above (excluding *Senior Experience* courses, of which at least five must be laboratory courses
4. Completion of the Biology *Senior Experience*

   Only two six-unit courses designated as tutorial, directed study or independent study can be counted toward the major or minor requirements and only one of these can be counted toward the upper-level laboratory requirement.

Required for the biology minor

1. Biology 110, 120, and 140
2. At least four six-unit courses in biology numbered 200 or above, of which at least two must be laboratory courses.
3. C average in the minor

   Only two six-unit courses designated as tutorial, directed study or independent study can be counted toward the major or minor requirements and only one of these can be counted toward the upper-level laboratory requirement.

Required for the interdisciplinary major in the natural sciences in biology and physics or geology

1. Biology 110 and 120 or Biology 110 and 140
2. Physics 150 and 160 or, with the permission of the secondary department, Physics 120 and 130, and
3. Geology 110 (any section) and Geology 210, chosen to include the secondary discipline
4. At least 10 six-unit courses in the natural sciences (biology, chemistry, geology, and physics) numbered 200 or above, with at least five in biology (of which at least three must be laboratory courses), and at least three in the secondary discipline in other departments
5. Completion of the Biology *Senior Experience*

   Previous interdisciplinary combinations of biology and chemistry have been replaced by the Biochemistry major.

BIOLOGY

Wisconsin Teacher Certification
Students who major in biology and who wish to gain certification to teach biology in Wisconsin public schools should choose a broad range of biology courses that includes ecology, plant and animal organismal biology, as well as molecular and cellular biology. Students should gain experience in both field and laboratory research. Beyond the coursework required for the biology major, students will need to take the following additional courses:

- One 6-unit geology course
- One 6-unit physics course
- EDST 180: *Psychology of Learning*
- EDST 340: *Sociology of Education*
- EDST 350: *Ethnicity, Cultural Diversity, and Education*
- EDUC 560: *Methods in Middle and Secondary Teaching*
- EDUC 430: *Educating All Learners*
- EDUC 650: *Student Teaching*
- EDUC 660: *Student Teaching Seminar*

For more detailed information about the certification program refer to the course of study for the Department of Education.

***Senior Experience* in Biology**
Purposeful advising in the spring of the sophomore year and attendance at the spring BioFest is meant to inspire sophomore students to begin thinking about what they might want to undertake as their culminating project in biology. At a retreat at Björklunden in the late fall of the junior year, students will hear from department faculty, the internship coordinator, and others about opportunities available for senior experience projects. Breakout groups will allow students to brainstorm ideas for projects. Project work (research, internship, creation of a curricular module, draft of a grant proposal, draft of a children's book on biology, production of art about biology, or other creative project) generally will be undertaken prior to term 2 of the senior year.

In the senior year, students will take two terms of BIO600:*RABLS* (1 unit each) and one term of BIO650. The purpose of the BIO650 course is to bring to culmination each students' individual *Senior Experience* project. Each student will prepare a paper that places her or his project into a broader context, compares it to our past and current understanding of the topic using primary literature, and summarizes the student’s project or results. Papers will take whatever form is most appropriate for each student's project. In the case of students preparing a thesis for honors, for example, the paper will constitute the introduction to the thesis. Students undertaking creative projects might submit a less lengthy paper, but all projects, regardless of type will be accompanied by a contexualizing and reflective paper. The *Senior Experience* will culminate with a symposium, BioFest, in the spring term, at which all students will present the results of their projects (or the project itself) as a poster or demonstration.

BIOLOGY

Courses

BIOL 100
The Biology of Human Reproduction
An introductory lecture course focusing on human reproduction to demonstrate some basic biological principles. The course includes discussion of cellular and organismal processes related to the development of human biological complexity. Current research in reproductive biology and its impact on the individual and society is considered. Lecture only. Primarily for non-science majors; credit not applicable to the biology major. Units: 6.

Also listed as Gender Studies 180

BIOL 103
Biotechnology and Society
An examination of basic biological principles underlying current biotechnology in the fields of human genetics and genetic engineering. Discussion of methods of basic scientific research, the impact of technology on society, and ethical problems in human and agricultural genetics. Credit not applicable to biology major. Weekly laboratories will introduce basic experimental methodology and procedures. Units: 6.

BIOL 110
Integrative Biology: Principles
An introduction to the unified science of life. Emphasis on the experimental approach, to show the interrelationships of living things by examining their metabolism, growth and development, genetics, behavior, ecology, and evolution. Lecture and laboratory. Units: 6.

Prerequisite: Permission of the department chair required to register

BIOL 120
Integrative Biology: Autotrophs
An introduction to the development, physiology, and evolution of plants, drawing illustrations from organisms throughout the taxon. Lecture and laboratory. Units: 6.

Prerequisite: BIOL 110; permission of the department chair required to register.

BIOL 140
Integrative Biology: Heterotrophs
An introduction to the biology of animals and arotrophic microbes and protists, including studies of the phylogeny, morphology, physiology, development, behavior, and ecology of representatives of the major phyla. Lecture and laboratory. Units: 6.

Prerequisite: BIOL 110; permission of the department chair required to register

BIOLOGY

BIOL 200
Animal Behavior
A lecture and field-study course examining the principles and problems of animal behavior. Subjects include orientation, feeding, locomotion, communication, escape in time and space, biological rhythms, mate choice, and aspects of social behavior, examined from evolutionary, ontogenetic, physiological, ecological, and ethological perspectives. Lecture and laboratory. May be taken separately or as part of the Marine Biology Term. Units: 6.

Also listed as Environmental Studies 210

Prerequisite: BIOL 140

BIOL 210
Biodiversity
The influence of climate on global habitats is considered. Selected terrestrial life zones, including neotropic, paleotropic, montane, desert, cold temperate, and warm temperate, are analyzed and stresses produced by climate and habitat evaluated. Adaptive responses at the morphological and physiological levels are investigated and scientific principles are applied to contemporary ethical issues, including restoration and conservation ecology. Lecture only. Units: 6.

Also listed as Environmental Studies 211

BIOL 212
Origins: Solar System, Earth, Life
This course explores questions of deep origins—of the Solar System, Earth, and Life—and how these can be addressed through the methods of physics, geology, and biology. Topics considered include stellar evolution, planetary formation, the origin of the Moon, the differentiation of the Earth, and geological and biological constraints on the nature of the earliest lifeforms. Units: 6.

Also listed as Physics 212, Geology 215

Prerequisite: Introductory course in any two different natural sciences; at least one intermediate course in a natural science; and at least sophomore standing.

BIOL 222
Parasitology
Students will examine and compare the complex life cycles of a variety of parasites, including those of medical and veterinary importance. Specific topics covered within the course will include: parasite biochemistry, ecology, parasite evasion of the host immune system, host immune responses, how parasites may alter host behavior. The laboratory component of the course will include both live and preserved specimens. Units: 6.

Prerequisite: BIOL 140

BIOLOGY

BIOL 230
General Ecology
An introduction to the interactions between organisms and the environment, exploring the role of physical, chemical, and biotic processes, including human activities, in determining the structure and function of populations, communities, and ecosystems. Topics will include resource availability, competition, predation, symbiosis, and natural and anthropogenic disturbances such as disease, biological invasions, pollution, and climate change. Lecture and laboratory. Units: 6.

Also listed as Environmental Studies 220

BIOL 231
Physiological Ecology
Biological stresses induced by environmental variables are described. Physiological and molecular adaptations associated with flowering, disease resistance, pollination, germination, and nutrient uptake and partitioning are discussed and investigated, using both field and laboratory experience. Lecture and laboratory. Units: 6.

Also listed as Environmental Studies 212

Prerequisite: BIOL 110

BIOL 235
Evolutionary Biology
A study of biological evolution, including natural selection, adaptation, the evolution of sex, speciation, extinction, and constraints on evolutionary change. Readings include classic and current literature. Two lectures and one discussion per week. Units: 6.

Also listed as Environmental Studies 213

Prerequisite: BIOL 120, BIOL 140, ANTH 140 or consent of instructor

BIOL 237
General Endocrinology
An examination of the endocrine system, a major regulator of an animal's development, physiology, and behavior. Attention to both classic techniques and recent developments involving hormones and other chemical mediators such as neurohormones, neurotransmittors, pheromones, and chemical inductors. Lecture only. Units: 6.

Prerequisite: BIOL 140

BIOL 240
Morphogenesis of the Vertebrates
An integrated lecture and laboratory course that undertakes the study of the structure and function of vertebrate organ systems through examination of morphology. Vertebrate ontogeny, phylogeny, and anatomy are addressed. Units: 6.

Prerequisite: BIOL 140

BIOLOGY

BIOL 241
Cell Physiology
The structure and organization of the eukaryotic cell are described and employed to understand functional interrelationships at the organelle and molecular levels. Major processes considered include external environmental control mechanisms, developmental events, the regulation of energy exchange, and membrane function. Lecture only. Units: 6.

Prerequisite: BIOL 110

BIOL 242
Comparative Physiology
A comparative study of the variety of solutions and adaptations diverse animals can make to similar problems — obtaining and transporting oxygen, maintaining water and salt balance, utilizing food, movement, and nervous and hormonal integration. Lecture and laboratory. Units: 6.

Prerequisite: BIOL 140

BIOL 245
Conservation Biology
This course explores the scientific concepts related to the conservation and restoration of the Earth's biological diversity. Topics include patterns of species and ecosystem diversity, the relationship between biodiversity and ecosystem functioning, causes of extinction, assessing extinction risk, behavioral indicators, *in-situ* and *ex-situ* management strategies for endangered species, and ecosystem restoration. Lecture only. Units: 6.

Also listed as Environmental Studies 245

Prerequisite: BIOL 110 and one other course in the natural sciences.

BIOL 250
The Vegetation of Wisconsin
The principles of plant-environment interrelationships are developed through extensive field study of Wisconsin vegetation. Emphasis is placed on the manner in which physical and biological factors influence competition, adaptation, and structure in major local habitats. Lecture and laboratory. Units: 6.

Also listed as Environmental Studies 214

BIOL 260
Genetics
A lecture and laboratory study of the principles of inheritance to sex determination and the concepts of historical and modern eugenics and genetic engineering. Units: 6.

Prerequisite: Sophomore standing and BIOL 110 or ANTH 140

BIOLOGY

BIOL 280
Experimental Design and Statistics
An introduction to the design of sampling programs and experiments in biological studies, as well as methods of data analysis and interpretation. Course highlights the importance of considering possible statistical analyses when planning studies, including the role of descriptive, exploratory, and confirmatory statistics in data analysis and interpretation. Lecture only. Units: 6.

Prerequisite: BIOL 120 or 140

BIOL 300
Immunology
This course will cover the basic concepts of immunology, including differentiation of immune cells, antibody structure and diversity, antigen-antibody reactions, the major-histocompatibility complex, the complement system, immune responses to pathogens, allergies and auto-immune diseases, and comparative immunology. The course will also examine recent advances in the field through current peer-reviewed publications. The weekly laboratory will examine the basic questions, experimental subjects, and procedures of the field. Units: 6.

Prerequisite: Junior standing or permission of instructor.

BIOL 301
Molecular Systematics
An introduction to the current practices used to estimate evolutionary relationships among organisms using molecular information. Students will learn methods of constructing phylogenetic trees through the reading and in-class discussion of research articles, and practice with data sets and computer software. Units: 3.

Prerequisite: BIOL 120 or 140

BIOL 326
Microbiology
A study of microbial life with an emphasis on prokaryotes. Microbial physiology is examined in the context of how unique characteristics allow microbes to exploit a vast diversity of environments, including the human body. Laboratory exercises introduce students to techniques used to safely study microorganisms. Units: 6.

Prerequisite: BIOL 110 and CHEM 116 or concurrent enrollment

BIOL 330
Aquatic Ecology
The principles of the ecology of fresh waters, developed through discussions, laboratory, and field investigations of the functional relationships and productivity of biotic communities as they are affected by the dynamics of physical, chemical, and biotic parameters. Lecture and laboratory. Units: 6.

Also listed as Environmental Studies 310

Prerequisite: BIOL 120, 140, or 230

BIOLOGY

BIOL 340
Topics in Neuroscience
A study of the nervous system from the perspectives of psychology, biology, and/or biological anthropology. Topics vary year to year and may include glial cells, neural development, and the evolution of nervous systems and neurotransmitter systems. Lecture only. May be repeated with consent of instructor.

Topic for Winter 2011: Evolutionary Perspectives on Human Brain and Cognition
This course will consider the human brain and human cognition through the analysis of comparative studies of great apes, the fossil record of human brain evolution, evolutionary genetic evidence, and adaptationist approaches. We will seek to develop a critical understanding of recent findings, in the light of past research.

Units: 6.
Also listed as Psychology 580, Anthropology 580

Prerequisite: CHEM 116 or 119 and either BIOL 140 and one course in psychology, or PSYC 360 and one course in biology, or consent of instructor

BIOL 345
Terrestrial Field Ecology
A hands-on course intended to demonstrate basic ecological principles using local terrestrial ecosystems. Field research projects will introduce students to methods in hypothesis development, experimental design, data collection, statistical analysis, and scientific writing and presentation. Research topics will include estimating population size, community structure, plant-animal interactions, and foraging behavior. Lecture and laboratory. Units: 6.

Also listed as Environmental Studies 345

Prerequisite: BIOL 120 or BIOL 140 and sophomore standing

BIOL 354
Molecular Biology
An interdisciplinary examination of regulatory mechanisms leading to differential gene expression. Main topics include transcription, translation, gene and protein structure, and modern genomics. The application of current molecular techniques is emphasized throughout the course. Laboratory work is experimental in approach. Lecture and laboratory. Units: 6.

Prerequisite: Sophomore standing, BIOL 110, and CHEM 115

BIOL 356
Genomics
An overview of the recently emerged field of bioinformatics. Classes will include lectures and computer practicals. Topics covered will include: genome projects, DNA and protein sequence analysis, multiple sequence alignments, searching biological databases, protein structure prediction, transcriptomes and proteomes, and microarrays. Units: 6.

Prerequisite: One of BIOL 260, BIOL 351, BIOL 354, BIOL 444, or CHEM 340

BIOLOGY

BIOL 380
Ecological Modeling
An introduction to the process of developing mathematical descriptions of the interactions between components of a population, community, or ecosystem, and the use of computer simulation as a tool for understanding ecology and natural resource management. Topics include population growth, predator-prey and competitor interactions, and mass balance in ecosystems. Units: 6.

Also listed as Environmental Studies 380

Prerequisite: BIOL 230, 245, 330, or 345

BIOL 434
Ecological Energetics
Field and laboratory experimental investigations of the transfer and transformation of energy or energy-containing materials between and within organisms and populations of aquatic ecosystems. Part of the Marine Biology Term. Lecture and laboratory. Units: 6.

Also listed as Environmental Studies 410

Prerequisite: BIOL 330, concurrent enrollment in BIOL 505 and 200 and consent of instructor

BIOL 444
Biochemistry I
An introduction to the study of biological processes at the molecular level with emphases on protein struction and function, enzyme mechanism and kinetics, fundamentals of physical biochemistry, and the chemistry of biological molecules, including carbohydrates, lipids, and nucleic acids. Units: 6.

Also listed as Chemistry 340

Prerequisite: CHEM 250 or concurrent enrollment, or consent of instructor

BIOL 450
Special Topics in Biology
A course designed to offer students an opportunity to study important issues in biology not covered in other regularly offered classes. Activities may include reading and analysis of material from primary literature, consideration of interdisciplinary connections, and field and laboratory activities. Units: 6.

Prerequisite: BIOL 110 and either BIOL 120 or BIOL 140, or consent of instructor

BIOLOGY

BIOL 453
Developmental Biology
An experimental approach to animal development with laboratory and lecture emphasis on the molecular and cellular level. Includes discussions of pattern formation, differentiation, cell interactions, gametogenesis, fertilization, and early embryogenesis. Lecture and laboratory. Units: 6.

Prerequisite: BIOL 140; concurrent enrollment in or completion of one of the following: BIOL 241, 444 (or CHEM 340), 351 or 354

BIOL 455
Biochemistry II
A continuation of Biochemistry I. A study of biological processes at the molecular level with an emphasis on metabolic pathways, recent advances in biochemical medicine, and biochemical aspects of gene replication, protein synthesis, molecular motors, and sensing. The course is divided between lecture and discussion and will rely heavily on current biochemical literature. Units: 6.

Also listed as Chemistry 440

Prerequisite: CHEM 340 or consent of instructor

BIOL 460
Advanced Research in Biomolecular Chemistry
A formal introduction to advanced research and techniques in biochemistry. Students will go through the process of developing an independent research project from analyzing scientific literature to conducting experiments. Results and data analysis will be disseminated in the form of oral or written reports. Units: 6.

Also listed as Chemistry 442

Prerequisite: CHEM 340 or BIOL 354, and consent of instructor

BIOL 505
Coral Reef Environments
Examines the ecology of coral reef environments. Lecture, laboratory, and field components. Part of the Marine Biology Term. Lecture and laboratory. Units: 6.

Also listed as Environmental Studies 505

Prerequisite: BIOL 330 and concurrent enrollment in BIOL 200 and BIOL 434

BIOL 510
Modern Concepts of Embryogenesis
A broad-based study of recent advances in the field of developmental biology. Critical review of current literature on genetic, molecular, and functional studies elucidating the underlying mechanisms of embryogenesis. Units: 6.

Prerequisite: BIOL 241, 444, 351, or 354

BIOLOGY

BIOL 520
Cancer Biology
An advanced seminar covering key areas of cancer biology, including epidemiology, molecular diagnostics, mechanisms of carcinogenesis, and current treatments. Students will undertake critical review of current literature in these fields and will have input into course content. Units: 6.

Prerequisite: BIOL 241 or BIOL 260 or BIOL 354 or BIOL 444

BIOL 570
Biological Physics
Develops and explores the physical principles underlying biological systems, with a particular emphasis on building quantitative models. Applies fundamental topics including thermodynamics, fluid dynamics, elasticity, and electrostatics to model molecular and cellular phenomena such as gene expression, virus assembly, DNA bending and stretching, and nerve impulses. Units: 6.

Also listed as Physics 570

Prerequisite: PHYS 151, and one of PHYS 230, CHEM 252, CHEM 340, or BIOL 354

BIOL 600
Recent Advances in Biology Seminar
A multidisciplinary lecture series on modern biological theory and research. Students attend seminars and prepare short summaries or “reaction papers” on topics covered. Biology faculty members and visiting scientists in biological and allied fields present seminars relating their research to the broader aspects of their disciplines. Topics discussed within any academic year provide a comprehensive exposure to the current frontiers of biological research. May be repeated for a maximum of three units. Units: 1.

Prerequisite: Senior standing and declared major in biology, or consent of instructor

Courses

BIOL 650
Biology Senior Capstone
Senior capstone in which students will benefit from direct input and feedback on their scientific writing and oral presentation skills as they complete senior experience papers. Successful completion of BIOL 650 includes participation in BioFest, a symposium of biology senior experience projects during spring term and successful completion of two terms of the Recent Advances in Biology lecture series. Units: Variable.

Prerequisite: Biology and biochemistry majors only; senior class standing except by permission.

BIOL 390, 590, 690
Tutorial Studies in Biology
Individual investigations of problems in biology. Units: Variable.

Prerequisite: Counter registration required

BIOLOGY

BIOL 191, 391, 591, 691
Directed Study in Biology
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

BIOL 399, 599, 699
Independent Study in Biology
Individual, in-depth investigation of a specific biological problem. Students contemplating an honors project should register for this course. Units: Variable.

Prerequisite: Counter registration required

BIOMEDICAL ETHICS

Professors: De Stasio (Biology, The Raymond H. Herzog Professorship in Science), Finkler* (Economics, The John R. Kimberly Distinguished Professorship in the American Economic System)
Associate professors: Ansfield (Psychology), Boleyn-Fitzgerald (Philosophy, Edward F. Mielke Professorship in Ethics in Medicine, Science, and Society, chair), M. Jenike (Anthropology)
Assistant professor: B. Jenike (Anthropology)

* On leave Term(s) III

The minor in biomedical ethics is designed to coordinate a student's background and interests in biomedical ethics, health care public policy, and the biological sciences with a variety of more specialized approaches to the study and application of relevant principles, insights, and understandings gleaned from those backgrounds and interests. This minor has been designed to appeal to Lawrence students planning further work in medicine, nursing, genetic counseling, public health, and other areas of study in or related to health care.

2010-2011 Course Catalog

Required for the minor in biomedical ethics

1. Completion of the following core courses:
    a. Biomedical Ethics 120/Philosophy 120: *Introduction to Biomedical Ethics*
    b. Biology 110: *Principles of Biology*, Biology 103: *Biotechnology and Society*, or Anthropology 140: *Biological Anthropology*
    c. Biomedical Ethics 290/Economics 290: *The Economics of Medical Care* or Biomedical Ethics 495/Government 495: *Health Policy*
    d. Psychology 245: *Health Psychology* or Anthropology 342: *Medical Anthropology*
    e. Biomedical Ethics 380/Philosophy 380: *Ethics of Technology* or an approved independent study project on some aspect of biomedical ethics or health policy.
2. 12 additional units from the courses listed below Independent study projects must be approved by the advisory committee. Possible contexts for projects include a Mielke, Kasel, or Hughes internship, a tutorial, an independent study course, or a health care-related project in conjunction with an off-campus program.

Courses that fulfill requirement number two

- Anthropology 210: *Research Methods in Cultural Anthropology*
- Anthropology 342: *Medical Anthropology*
- Biology 260: *Genetics*
- Biology 354: *Molecular Biology*
- Biology 453: *Developmental Biology*
- Economics 270: *Public Sector Economics: Taxation Analysis*
- Economics 275: *Public Sector Economics: Expenditure Analysis*
- Economics 290: *The Economics of Medical Care*
- Economics 400: *Industrial Organization*
- Economics 440: *Public Expenditure*
- Geology 213: *Geology and Health*
- Government 380: *Introduction to Public Policy*
- Government 465: *Environmental Politics*
- Government 495: *Health Policy*

BIOMEDICAL ETHICS

- Philosophy 320: *Ethics*
- Philosophy 350: *Political Philosophy*
- Philosophy 360: *Environmental Ethics*
- Philosophy 370: *Advanced Studies in Bioethics*
- Philosophy 380: *Ethics of Technology*
- Philosophy 430: *Philosophy of Law*
- Psychology 245: *Health Psychology*
- Psychology 250: *Psychopathology*
- Psychology 280 or 281: *Research Methods I and II* (only one term may count)

Courses

BIET 120
Applied Ethics: Introduction to Biomedical Ethics
The course will examine moral dilemmas created or intensified by recent advances in medical technology and study ways of analyzing those dilemmas to make them more tractable. We will focus on examples such as euthanasia and the right to die, abortion, behavior modification, allocation of scarce medical resources, *in vitro* fertilization, genetic screening and engineering, and human experimentation. Units: 6.

Also listed as Philosophy 120

Prerequisite: Recommended for freshmen and sophomores

BIET 245
Health Psychology
This course explores the link between mind and body from various psychological perspectives such as social, clinical, and psychobiological. We will survey the role of stress, emotion, self-regulation, and individual differences as predictors of health and illness. We also will examine assessment, diagnostic, treatment, and ethical issues in psychophysiological disorders. Units: 6.

Also listed as Psychology 245

Prerequisite: PSYC 100 or sophomore standing

BIET 290
The Economics of Medical Care
An analysis of how the economic organization of medical care affects the health and well-being of the population. Topics include who is treated, how much the treatment costs, and who pays the bill. Particular emphasis given to the roles of insurance and various national health policies and reform proposals. Units: 6.

Also listed as Economics 290

Prerequisite: ECON 100 or ECON 120

BIOMEDICAL ETHICS

BIET 370
Advanced Studies in Bioethics
A seminar examining one particular issue or set of issues in bioethics. Units: 6.

Also listed as Philosophy 370

Prerequisite: PHIL 120 or two courses in philosophy

BIET 380
Ethics of Technology
This course focuses on ethical issues that arise from the development of new technology. Specific topics may include artificial intelligence, information technologies, human enhancement, transhumanism, transgenesis, ectogenesis, nanoethics, and neuroethics. Units: 6.

Also listed as Philosophy 380

Prerequisite: One course in philosophy, junior standing, or consent of the instructor

BIET 495
Health Policy
A seminar addressing present and prospective health care policy in the United States. Emphasis on various contemporary health care problems, including high and rising costs, differences in access to medical service, and trade-offs between cost and quality. Specific topics include Medicare, Medicaid, medical malpractice, profit versus not-only-for-profit producers of care, and alternative delivery systems. Units: 6.

Also listed as Government 495

Prerequisite: Sophomore standing or consent of instructor

BIET 390, 590, 690
Tutorial Studies in Biomedical ethics
Units: Variable.

Prerequisite: Counter Registration Required.

BIET 191, 391, 591, 691
Directed Study in Biomedical Ethics
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

BIET 399, 599, 699
Independent Study in Biomedical ethics
Units: Variable. Prerequisite: Counter Registration Required.

CHEMISTRY

Professor: Lokensgard
Associate professors: Blackwell, Hall (chair)
Assistant professors: Debbert, Dickson, Navea
Visiting assistant professors: Roca, Stork

Chemists, biochemists, and chemical engineers have contributed in myriad ways to the development and utilization of the materials, medicines, foods, and fuels that are the hallmarks of modern life. They also have contributed greatly to the understanding and protection of the natural environment. Working in concert with biologists, geologists, physicists, psychologists, and others, chemists continue to play leading roles in the search for solutions to many of society's most pressing problems, including challenges to physical and mental health, pollution and its effects, resource recovery, and energy production and conservation. The study of chemistry at Lawrence prepares students for a broad range of opportunities and careers, including academic or industrial research, engineering, secondary or college teaching, medical or veterinary practice, law, business, or public service.

The Lawrence chemistry department is large enough to ensure that all the major areas of chemistry are well represented and small enough that students can build close working relationships with all the faculty members. Department faculty members are actively engaged in their own research programs, and aspects of those programs find their way into their courses as well. Thus, students are likely to encounter new developments in nanoscience and nanotechnology, consider experimental conditions that will reduce the environmental impact of laboratory wastes, reflect on new approaches to disease control, or explore instrumental techniques applicable in drug synthesis or forensic laboratories. Our goal is to engage students from diverse backgrounds and interests in the excitement of chemistry; foster in them the habit of informed and critical thinking; involve them in independent learning and research; and prepare them for the successful pursuit of a wide variety of professional opportunities.

Laboratory work in courses frequently emphasizes independent projects. All of the department's instruments and facilities are routinely available to students; research opportunities for work with members of the faculty are available during the school year and in the summer. Seniors are encouraged to participate in independent studies and research that may lead to an honors thesis and honors at graduation.

The chemistry major

Students major in chemistry for a variety of reasons and with a variety of career goals. Some are looking ahead to graduate work and careers in college or university teaching or research in academic, industrial, or government laboratory settings. Others find chemistry an excellent preparation for medical school and a career as a physician. Still others are interested in high school teaching, in management careers in the chemical industry, or in law (e.g., environmental or chemical patent practice).

CHEMISTRY

2010-2011 Course Catalog

Required for the chemistry major

1. Introductory Principles
    - Chemistry 115 and 116 or the equivalent
    - Mathematics 140, 150, and 160 or the equivalent
    - Physics 150 and 160
2. Three courses from Group I, three courses from Group II, and two courses (of which at least one must be a laboratory course) from Group III
   Note: No course can count in two different categories.
    - Group I: Structure, Properties, and Synthesis
      Chemistry 220, 247, 250, 252, 320, 340
    - Group II: Quantitative Chemistry
      Chemistry 210, 270, 370, 410, 470, 475
    - Group III: Topics, Applications, and Additional Subdisciplines
      Chemistry 270, 320, 340, 410, 440, 450, 470, 475
3. Six units of credit earned in Chemistry Seminar courses numbered 380, 480, and 680

Required for the chemistry minor
A minimum of six chemistry courses to include:

1. Introductory Principles
   Chemistry 115 and 116 or the equivalent
2. Two courses from Group I, two courses from Group II, and one course from Group III, of which three courses must be laboratory courses and one must be numbered 400 or above
   Note: No course can count in two different categories.
    - Group I: Structure, Properties, and Synthesis
      Chemistry 220, 247, 250, 252, 320, and 340
    - Group II: Quantitative Chemistry
      Chemistry 210, 270, 370, 410, 470, 475
    - Group III: Topics, Applications, and Additional Subdisciplines
      Chemistry 270, 320, 340, 410, 440, 450, 470, 475
3. At least three units of credit earned in Chemistry Seminar courses numbered 380, 480, and 680
4. C average in the minor

Required for the interdisciplinary major in the natural sciences in chemistry and physics or geology
Chemistry students who have strong secondary interests in physics or geology may construct a major involving chemistry and geology or physics, using the interdisciplinary major in the natural sciences. Previous interdisciplinary combinations of biology and chemistry have been replaced by the biochemistry major.
The requirements for the interdisciplinary major with chemistry as the primary discipline are:

1. Introductory course sequences in chemistry, physics, and geology, chosen to include the discipline of secondary interest. The introductory sequences are:
    - Chemistry 115 and 116 or the equivalent
    - Geology 110 and 210

    - Physics 150 and 160
2. Intermediate/Advanced Requirement: At least 10 six-unit courses in the sciences (biology, chemistry, geology, physics) numbered 200 or above, with at least five in chemistry and at least three in the secondary discipline.
3. Six units of credit earned in Chemistry Seminar courses numbered 380, 480, and 680

Advanced Placement
Students who have had the equivalent of a college general chemistry course are encouraged to take the Advanced Placement Examination in Chemistry administered by the Educational Testing Service. Students having sufficiently high scores may receive six units of college credit and may be advised to enroll in Chemistry 116 or in intermediate courses (Chemistry 210 or 320 or 250, 252).

***Senior Experience* in Chemistry**
The Chemistry Department's capstone sequence consists of a series of 3 seminars:

- CHEM 380 Seminar - Perspectives on Chemistry (Fall Term, 1 unit) Taken optimally by sophomores or juniors, this is a series of presentations by visiting chemists and Lawrence students, faculty, and staff, featuring current issues in chemistry, important applications of chemistry, and professional development topics appropriate to chemistry majors or minors, intended to introduce students to "life after Lawrence" early enough in college to affect their trajectories through the college curriculum. This course covers the major career destinations for chemistry students, of graduate school, health professions, chemical engineering, K-12 teaching, and the chemical industry.
- CHEM 480 Seminar: Chemical Literature (Winter Term, 2 units) A seminar course for chemistry majors and minors, taken optimally during the junior year, in which students learn how to educate themselves about the chemical literature in a field of interest to them. In this seminar, they learn the character and organization of the chemical literature and become familiar with search strategies, as each selects a topic and, guided by the instructor, conducts a literature search for key papers on that topic, constructs a bibliography, reads several of the most important of the papers, and prepares an end-of-term presentation highlighting key research findings related to their chosen topic. Students are encouraged to correlate their activities in this seminar with research projects that they undertake at Lawrence or elsewhere, which form the basis of the Senior Seminar.
- CHEM 680 Senior Seminar (Spring Term, 3 units): The culminating course in our capstone sequence asks each major to present an individual seminar presentation based on research they have done at Lawrence or elsewhere. 3 units.

Students are strongly encouraged to consult with their advisors and relevant department chairs to plan and negotiate their overall capstone experience as early as possible.

CHEMISTRY

Courses

CHEM 104
Life Sciences by Numbers
Guided individual and small-group study of selected topics in chemistry, biology, and the biomedical sciences through solving numerical problems embedded within “word stories” drawn very broadly from biological contexts, enabling students with good verbal skills to strengthen their competence and confidence in mathematical, logical, and critical thinking. No formal laboratory. Units: 6.

CHEM 108
The Chemistry of Art
A study of the chemistry underlying topics of interest to artists and art historians. Topics may include: papermaking; pigments, dyes, and binders; photography; glass and ceramics; metals; and printmaking. The course is designed for all students. Combined lecture and laboratory. Units: 6.

CHEM 109
Weird Science
A study of the chemistry underlying famous curious chemical phenomena such as Fitzroy's Storm Glass, glowing slime, sparklers, and the Mentos effect. Two three-hour laboratory sessions per week. The course is designed for all students, and satisfies the college's laboratory science general education requirement. Students should consult instructor if their background in high school chemistry is weak. Units: 6.

CHEM 111
Principles of Chemistry: Foundations
A one-term introduction to chemistry, with emphasis on its basic principles and their application in daily life, including the environment, food and nutrition and the like. Intended for students seeking a brief introduction to the field or desiring to fulfill general education requirements. Short laboratory exercises provide skills and methods for evaluating and interpreting laboratory data and practice in qualitative and quantitative reasoning. Three lectures and one laboratory session, or two integrated lab/discussion sessions per week. Units: 6.

CHEM 115
Principles of Chemistry: Structure and Reactivity
Introduction to the basic principles of chemistry, emphasizing structures of chemical species (atoms, ions, and molecules), stoichiometry, the relationships between structure and reactivity, basic chemical models (gas laws, *e. g.*) and laboratory skills. This course will serve primarily to prepare students who have not had any previous (high school) coursework in chemistry for CHEM 116. Three lectures and one laboratory session each week. Students with high school chemistry should normally take 116 instead of this course. Please see the chemistry department's web page for placement examination information. Units: 6.

Prerequisite: Placement examination

CHEMISTRY

CHEM 116
Principles of Chemistry: Energetics and Dynamics
Introduction to the study of chemistry, for students who have taken high school chemistry or CHEM 115, emphasizing stuctural and quantitative models of chemical behavior. Topics include bonding, thermochemistry, equilibrium, kinetics, and related applications. Three lectures and one laboratory per week. Enrollment is determined by placement examination. Please see the chemistry department's web page for placement examination information. Units: 6.

Prerequisite: Placement examination

CHEM 210
Analytical Chemistry
A course in the fundamental principles of quantitative analysis, stressing both chemical and instrumental techniques. Emphasis on application of analytical chemistry to practical problems, including environmental issues, food science, biochemical systems, and industrial processes. Opportunities for individually designed projects. Lectures and two laboratories per week. Units: 6.

Also listed as Environmental Studies 250

Prerequisite: CHEM 116 or 119 or consent of instructor

CHEM 212
Atmospheric & Environmental Chemistry
This course focuses on the fundamental chemical processes that control Earth's atmosphere, ocean, soil, and climate. The course emphasizes the mechanisms that regulate the flow of energy in different ecosystems, the environmental role of particulate matter and solar radiation, chemistry-climate relationships, and the anthropogenic impact on the environment. Units: 6.

Also listed as Environmental Studies 222

Prerequisite: CHEM 116

CHEM 225
Nanoscience and Nanotechnology
This course provides an introduction to the novelty, challenge, and excitement of nanoscale science and technology. In a series of team-taught two-week units based on both popular and technical literature, students will investigate some of the unique structures, properties, experimental techniques, and other processes that are associated with the nanoscale. No laboratory. Units: 6.

Prerequisite: At least one introductory course sequence in either chemistry (119 or 115, 116) or physics (150, 160 or 120, 130)

CHEMISTRY

CHEM 247
The Elements of Life
A seminar that introduces the biological chemistry of some 20 elements, mostly “inorganic,” that living systems incorporate and require, touching upon the topics of uptake, selectivity, compartmentalization, control, energetics, catalysis, structure, and toxicity. Students will draw from the text to elucidate in class the biological roles of individual elements. No laboratory. Units: 6.

Also listed as Environmental Studies 247

Prerequisite: CHEM 116 or 119 or consent of instructor

CHEM 250
Organic Chemistry I
A study of carbon compounds, with hydrocarbons discussed in detail and some of the major functional groups introduced. Lectures and weekly laboratory. Laboratory session directed toward the synthesis and analysis of organic compounds and the elucidation of reaction mechanisms. Units: 6.

Prerequisite: CHEM 116 or 119 or consent of instructor

CHEM 252
Organic Chemistry II
A continuation of the study of carbon compounds, including additional functional groups and polyfunctional compounds. One four-hour laboratory per week, directed toward more advanced synthetic and analytic problems. Units: 6.

Prerequisite: CHEM 250

CHEM 270
Biophysical Chemistry
A study of the physical processes involved in living systems including thermodynamics and equilibria, kinetics and transport phenomena, and applications of quantum chemistry and spectroscopy. Units: 6.

Prerequisite: CHEM 116, MATH 140 (or MATH 120 and MATH 130), and PHYS 130 or PHYS 160

CHEM 320
Inorganic Chemistry
A survey of structures, properties, reactivities, and interrelationships of chemical elements and their compounds. Topics include unifying principles and concepts that enable the interpretation of experimental data associated with materials. Emphasis on multidisciplinary aspects of inorganic chemistry. Lectures and weekly laboratory. Laboratory projects involve synthesis and studies of compounds using a variety of experimental methods. Units: 6.

Prerequisite: CHEM 116 or 119 or consent of instructor

CHEMISTRY

CHEM 340
Biochemistry I
An introduction to the study of biological processes at the molecular level with emphases on protein struction and function, enzyme mechanism and kinetics, fundamentals of physical biochemistry, and the chemistry of biological molecules, including carbohydrates, lipids, and nucleic acids. Units: 6.

Also listed as Biology 444

Prerequisite: CHEM 250 or concurrent enrollment, or consent of instructor

CHEM 370
Chemical Dynamics
Develops and explores theoretical descriptions of chemical systems: physical states, the laws of thermodynamics as applied to chemical and physical equilibria, chemical reaction kinetics, and spectroscopy. No laboratory. Units: 6.

Prerequisite: MATH 120 or 140; one of the following courses: PHYS 120, PHYS 150, CHEM 210, or CHEM 270; or consent of instructor

CHEM 380
Seminar: Perspectives on Chemistry
A series of presentations by visiting chemists and Lawrence students, faculty, and staff, featuring current issues in chemistry, important applications of chemistry, and professional development topics appropriate to chemistry majors or minors. Approximately one meeting per week. Two or more short “reaction papers” (a short seminar critique or summary) required of each student. Offered annually in the Fall Term. May be repeated for credit. Units: 1.

Prerequisite: Sophomore standing; offered annually in the Fall Term

CHEM 400
Advanced Topics in Chemistr
An examination of a particular, cross-disciplinary topic in chemistry.

Topic for Spring Term 2011:The Energy Conondrum An advanced course in inorganic chemistry focusing on emerging energy technologies. Topics may include solar, wind, geothermal, and nuclear energies, fuel cell technology, and biofuels, among others. Classroom experiences may include biodiesel synthesis, construction of fuel cells and dye-sensitized solar cells, and catalytic water splitting.

Units: 6.
Prerequisite: Junior standing with at least one chemistry course beyond general chemistry, or instructor approval.

CHEMISTRY

CHEM 410
Instrumental Analysis
An advanced course in instrumental methods of compound identification and analysis. Emphasis divided between instrument design and operating principles and interpretation of instrumental data. Discussion of spectroscopic, chromatographic, and electrochemical techniques. Illustrative experiments drawn from various fields of chemistry, with an emphasis on natural systems and environmental issues. One laboratory per week. Lectures and weekly laboratory. Units: 6.

Prerequisite: CHEM 210, 252, and 370 or consent of instructor

CHEM 420
Advanced Inorganic Chemistry
A continuation of inorganic chemistry addressing cross-disciplinary topics such as organometallic chemistry, bioinorganic chemistry, nanosciences, inorganic spectroscopy, and main group chemistry, with examples drawn from the primary literature. The course is especially recommended for majors who plan to continue studies in graduate or professional school. Units: 6.

Prerequisite: CHEM 250, CHEM 320, and CHEM 370

CHEM 425
Structure and Reactivity in Organometallic Chemistry
Compounds with metal-carbon bonds are important throughout organic, inorganic, biological and polymer chemistry. In this class, we will explore the structure and reactivity of both main-group and transition-metal organometallic compounds, and the bonding properties which give these compounds their activities. Units: 6.

Prerequisite: CHEM 252 and CHEM 320 or consent of instructor

CHEM 440
Biochemistry II
A continuation of Biochemistry I. A study of biological processes at the molecular level with an emphasis on metabolic pathways, recent advances in biochemical medicine, and biochemical aspects of gene replication, protein synthesis, molecular motors, and sensing. The course is divided between lecture and discussion and will rely heavily on current biochemical literature. Units: 6.

Also listed as Biology 455

Prerequisite: CHEM 340 or consent of instructor

CHEM 442
Advanced Reserch in Biomolecular Chemistry
A formal introduction to advanced research and techniques in biochemistry. Students will go through the process of developing an independent research project from analyzing scientific literature to conducting experiments. Results and data analysis will be disseminated in the form of oral or written reports. Units: 6.

Also listed as Biology 460 Prerequisite: CHEM 340 or BIOL 354, and consent of instructor

CHEMISTRY

CHEM 445
Biochemistry of Viruses
The advanced biochemical, molecular, epidemiological and biotechnological aspects of animal, bacterial and plant viruses will be covered in this course. Specific areas of virology will be covered, including viral structure and assembly, viral replication, viral recombination and evolution, virus-host interactions, viral transformations, antiviral drugs, and vaccines. Selected virus families are discussed individually with respect to classification, genomic structure, virion structure, virus cycle, pathogenesis, epidemiology and immunity. Units: 6.

Prerequisite: CHEM 340 or BIOL 354

CHEM 450
Topics in Advanced Organic Chemistry
A study of modern topics in organic chemistry, emphasizing current literature. Topics vary year to year and may include organic structure, reaction mechanisms, and synthetic methods. No formal laboratory; lab exercises may occasionally substitute for lectures. Units: 6.

Prerequisite: CHEM 252 and 370 or consent of instructor

CHEM 470
Quantum Chemistry and Statistical Mechanics
Develops and explores theoretical descriptions of macroscopic chemical systems and their relation to the microscopic point of view: equations of state for macroscopic systems of gases, liquids, and solids at equilibrium; the microscopic quantum description of atoms and molecules in such systems; statistical methods that link the macroscopic and microscopic levels of description; and the treatment of deviations from equilibrium. No laboratory. Units: 6.

Prerequisite: CHEM 370

CHEM 475
Spectroscopy
A study of the theory and practice of spectroscopy. Theoretical topics may include energy quantization, selection rules, and group theory. Experimental topics may include infrared, Raman, ultraviolet/visible, electron spin resonance, or nuclear magnetic resonance spectroscopies and their applications. Two lectures and two laboratories per week. Units: 6.

Prerequisite: CHEM 370 or CHEM 470

CHEM 480
Seminar: Chemical Literature
A seminar course intended primarily for junior majors and minors in chemistry. Students learn the character and organization of the chemical literature and become familiar with search strategies, as each selects a topic and, guided by the instructor, conducts a literature search for key papers on that topic, contructs an annotated bibliography, reads several of the most important of the papers, and prepares an end-of-term presentation highlighting key research findings related to their chosen topic. Units: 2.

Prerequisite: Junior standing, or consent of instructor

CHEMISTRY

CHEM 680
Seminar: Senior Seminar
A seminar course for senior majors, culminating in an individual seminar presentation by each student. Units: 3.

CHEM 390, 590, 690
Tutorial Studies in Chemistry
Advanced reading and/or laboratory work in chemistry on topics not covered in regular offerings. Available to both majors and non-majors. Units: Variable.

Prerequisite: Counter Registration Required.

CHEM 191, 391, 591, 691
Directed Study in Chemistry
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

CHEM 195, 395, 595, 695
Internship in Chemistry
An opportunity to connect work experiences in industry, government, or the non-profit sector to the academic program in chemistry. Internships, either summer activities or full- or part-time work experiences during the academic year, are arranged by students in consultation with a Lawrence instructor. In each case, the academic credit (and grading) is based on related readings, discussion with the instructor, and a summary report, plus a presentation on campus, usually in the chemistry seminar series. Advance consultation and application is required, normally by the fifth week of the previous term. Units: Variable.

Prerequisite: Sophomore standing. Counter Registration Required.

CHEM 399, 599, 699
Independent Study in Chemistry
Original experimental or theoretical research in cooperation with a faculty member. Seniors considering an honors project should register for this course for one or more terms. Available to both majors and non-majors. Units: Variable.

Prerequisite: Counter Registration Required.

CHINESE AND JAPANESE

Associate professors: Sung (chair term III), Yang (chair terms I and II)
Assistant professor: Balsekar (Government)
Instructor: Tanaka
Lecturers: Galambos (Linguistics), Sasa

The Department of Chinese and Japanese provides students with a coherent study of a cultural region. This region primarily encompasses China, Japan, and Korea — countries that spring from a common historical experience and share many common values and traditions. Though language forms an important part of this study, the focus of the curriculum remains as much cultural as linguistic. Courses are thus taught in English as well as in East Asian languages.

2010-2011 Course Catalog

Required for the Chinese language and literature major

1. Completion of beginning and intermediate Chinese language courses: CHJA 101, 102, 201, 202, 203, 301
2. Two six-unit courses in Chinese literature, taught in translation, selected from the following:
    - CHJA 260: *East Asian Classics in Translation*
    - CHJA 350: *Modern Chinese Literature and Cinema in Translation*
    - CHJA 520: *Seminar in Chinese Literature*
3. Three six-unit courses in advanced Chinese, taught in Chinese:
    - CHJA 401: *Advanced Communicative Chinese*
    - CHJA 402: *Advanced Readings in Chinese*
    - CHJA 590: *Tutorial Studies in Chinese or CHJA 598: Internship in Chinese*
4. One senior-level independent study, CHJA 699 (6 units)

Required for the Chinese language minor

1. Completion of beginning and intermediate Chinese language courses: CHJA 101, 102, 201, 202, 203, and 301 or the equivalent
2. One advanced language course
3. An exit proficiency interview
4. C average in the minor

Required for the Japanese language minor

1. Completion of beginning and intermediate Japanese language courses: CHJA 111, 112, 211, 212, 213, and 311
2. One advanced language course
3. An exit proficiency interview
4. C average in the minor

Advanced Placement
Students who have studied Chinese or Japanese in high school and who wish to study Chinese and Japanese beyond the beginning level are required to take a placement examination. They also are advised to consult with the department chair in order to ensure their proper placement in language classes.

CHINESE AND JAPANESE

International Study
Opportunities exist to study in both Chinese- and Japanese-speaking areas through an ACM program in Tokyo and the Associated Colleges in China Program in Beijing (see Off-Campus Programs

***Senior Experience* in Chinese or Chinese and Japanese**
CHJA 699: A senior level one-term independent study (6 units) culminating in the completion of a substantial paper or project derived from previous coursework in the discipline or related fields or field experience in consultation with department faculty. Students with sufficiently advanced Chinese language skills are encouraged to use some Chinese language sources in carrying out their research. Students must share the results of their work in a public forum prior to graduation.

Chinese Language Courses

CHJA 101
Beginning Chinese I
An introduction to elementary Mandarin Chinese. Emphasis on the acquisition of basic language skills of listening, speaking, reading, and writing, with discussions to practice pronunciation, grammar, and vocabulary. Five class meetings per week. Units: 6.

CHJA 102
Beginning Chinese II
A continuation of CHJA 101 with further practice in basic language skills. Five class meetings per week. Units: 6.

Prerequisite: CHJA 101

CHJA 201
Beginning Intermediate Chinese
A course to help students attain minimal proficiency in conversational Chinese and begin to read and write beyond the elementary level. Five class meetings per week. Units: 6.

Prerequisite: CHJA 102

CHJA 202
Intermediate Chinese I
Intermediate-level Chinese with further practice in conversational fluency and exposure to more difficult levels of reading and writing. Five class meetings per week. Units: 6.

Prerequisite: CHJA 201

CHJA 203
Intermediate Chinese II
Continued intermediate-level work in Chinese. Focus on developing more sustained use of Mandarin Chinese in conversation, reading, and writing. Five class meetings per week. Units: 6.

Prerequisite: CHJA 202

CHINESE AND JAPANESE

CHJA 301
Advanced Intermediate Chinese
An advanced Chinese course for students who want to develop their language skills. Extensive use of contemporary print and media materials to emphasize written as well as oral proficiency while providing students with a basic cultural understanding of today's China. Course does not count toward the humanities general education requirement for B.A. and B.A./B.Mus students. Units: 6.

Prerequisite: CHJA 203 or consent of instructor

CHJA 401
Advanced Communicative Chinese
An advanced course, taught in Chinese, designed to strengthen the language proficiency of upper-level students, especially those returning from studying abroad in the Associated Colleges in China program. Students gain intensive practice in all communicative skills through extensive oral discussion, preparation of written reports on various social topics, and exposure to current academic essays, short stories, and films. Course does not count towards the humanities general education requirement for B.A. and B.A./B.Mus students. Units: 6.

Prerequisite: CHJA 301 or consent of instructor

Japanese Language Courses

CHJA 111
Beginning Japanese I
An introduction to beginning Japanese. Emphasis on the acquisition of basic language skills of listening, speaking, reading, and writing, with discussions to practice pronunciation, grammar, and vocabulary. Five class meetings per week. Units: 6.

CHJA 112
Beginning Japanese II
A continuation of CHJA 111 with further practice in basic language skills. Five class meetings per week. Units: 6.

Prerequisite: CHJA 111 or equivalent

CHJA 211
Beginning Intermediate Japanese
A course to help students attain minimal proficiency in conversational Japanese and begin to read and write beyond the elementary level. Five class meetings per week. Units: 6.

Prerequisite: CHJA 112

CHJA 212
Intermediate Japanese I
Intermediate-level Japanese with further practice in conversational fluency and exposure to more difficult levels of reading and writing. Five class meetings per week. Units: 6.

Prerequisite: CHJA 211 or consent of instructor

CHINESE AND JAPANESE

CHJA 213
Intermediate Japanese II
Intermediate-level Japanese with further practice in all four skills. A continuation of CHJA 212. Five class meetings per week. Units: 6.

Prerequisite: CHJA 212 or consent of instructor

CHJA 311
Advanced Intermediate Japanese
This advanced course is designed for students who wish to develop their language skills in Japanese beyond the intermediate level. It provides students with a basic cultural understanding of today's Japan. Contemporary print and media materials will be used to enhance written as well as oral proficiency. Course does not count towards the humanities general education requirement for B.A. and B.A./B.Mus students. Units: 6.

Prerequisite: CHJA 213 or consent of instructor

CHJA 411
Advanced Communicative Japanese
An advanced course, taught in Japanese, designed to strengthen the language proficiency of upper-level students, especially those returning from studying in Japan. Course does not count towards the humanities general education requirement for B.A. and B.A./B.Mus students. Units: 6.

Prerequisite: CHJA 311 or consent of instructor

Literature and Culture Courses

CHJA 260
East Asian Classics in Translation
This introductory course explores encounters with nature in East Asian texts through close reading of primary texts in English translation—Taoist philosophy, lyric poetry, personal memoirs, fiction and film—from the traditional periods of China and Japan, ending with a contemporary Japanese novel set in 1980s suburban Tokyo. Particular attention is paid to literary form, voice, aesthetic concerns, and issues relating to humans' relationship with nature. Units: 6.

Also listed as East Asian Studies 260, Environmental Studies 206

Prerequisite: Sophomore standing; EAST 140 recommended

CHINESE AND JAPANESE

CHJA 265
Introduction to Japanese Language and Culture
A survey introducing major characteristics of Japanese language with reference to the structure of Japanese society. Topics include honorifics, use of pronouns, loan words, age and gender differences in the language. The course will also familiarize students with various aspects of traditional and contemporary Japanese culture. Units: 6.

Also listed as East Asian Studies 265, Linguistics 265

Prerequisite: Sophomore standing; CHJA 112 recommended

CHJA 310
Introduction to East Asian Linguistics
Survey of genetic, regional, and typological classification of East Asian languages; writing systems for Chinese, Japanese, Korean, and Tibetan languages; descriptive and comparative analyses of phonological, morphological, and syntactic structures of East Asian languages. More than one language may be investigated in detail. Units: 6.

Also listed as East Asian Studies 310, Linguistics 310

Prerequisite: LING 150 and sophomore standing

CHJA 325
Destination China
A required course for students who plan to study in China on the Associated Colleges in China (ACC) Program or an equivalent program. Students will be asked to participate in weekly meetings on various topics related to contemporary China. Units: 2.

Prerequisite: Acceptance into study abroad program in China

CHJA 350
Modern Chinese Literature and Cinema in Translation
A survey of 20th-century Chinese fiction and cinema. Iconoclastic works of modern Chinese vernacular fiction from 1919 through the post-Cultural Revolution (1966-1976) will be juxtaposed alongside films dealing with the same period, such as *Red Sorghum* (1987) and *Farewell, My Concubine* (1992) made by the so-called Fifth Generation of film directors (born after 1949, when the People's Republic was founded). Class conducted in English. No knowledge of Chinese required. Units: 6.

Also listed as East Asian Studies 350, Film Studies 350

Prerequisite: Sophomore standing; EAST 150 recommended

CHINESE AND JAPANESE

CHJA 402
Advanced Readings in Chinese
An advanced course in Chinese that introduces students to texts in classical and documentary style. During the first half of the course, students review the basic grammar and vocabulary of classical Chinese through short readings in traditional classical texts. The second half builds upon this base to introduce students to contemporary readings in literature and documents, which draw heavily upon classical elements. Course does not count towards the humanities general education requirement for B.A. and B.A./B.Mus students. Units: 6.

Prerequisite: CHJA 301 or consent of instructor

CHJA 412
Advanced Readings in Japanese
The aims of this advanced Japanese course are two-fold: 1) to accelerate students' Japanese proficiency in reading to the advanced level; and 2) to learn the fundamentals of classical Japanese grammar to read pre-modern historical and literary texts. Units: 6.

Prerequisite: CHJA 411 or consent of the instructor.

CHJA 520
Seminar in Chinese Literature
An introduction to some of China's greatest literary texts of a single genre, period, author, or theme. Issues addressed include gender relations, responses to traditional roles, and the development of fiction in China. Knowledge of Chinese not required. Advanced students of Chinese language may take concurrently CHJA 391 or CHJA 591, for three units, and work with the instructor to read excerpts in the original Chinese. Units: 6.

Also listed as East Asian Studies 520

Prerequisite: Sophomore standing; EAST 140 recommended

CHJA 390, 590, 690
Tutorial Studies in Chinese or Japanese
Individualized advanced study under regular staff direction on topics not covered in lower-level courses. Units: Variable.

CHJA 191, 391, 591, 691
Directed Study in Chinese or Japanese
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

CHINESE AND JAPANESE

CHJA 195, 395, 595, 695
Internship in Chinese or Japanese
An opportunity for students to apply their Chinese or Japanese language skills in business, government, and the non-profit sector on the regional, national, and international levels. Arranged in collaboration with and supervised by a member of the department. Includes discussion, report, and/or portfolio. Advance consultation and application required. Units: 3.

Prerequisite: Study abroad at the third-year level or CHJA 401 and 402 or CHJA 411

CHJA 399, 599, 699
Independent Study in Chinese or Japanese
Individualized advanced research under staff guidance to prepare a substantial paper, usually for submission for honors. Units: Variable.

CLASSICS

Associate professor: McNeill (chair)
Assistant professor: Tracy

Classics is a quintessentially interdisciplinary field of intellectual inquiry and academic endeavor. The program of the classics department emphasizes both ancient history and the careful reading and critical study of selected Greek and Latin texts, together with formal study of the languages themselves, as a basis for further study of classical literature, art, history, linguistics, mythology, culture, and civilization.

The classics department accordingly offers three related but distinct concentrations. The traditional concentration in classical languages and literatures produces potential scholars well trained in classical philology and Greek and Latin literature, and also prepares students for teaching certification in Latin. The concentration in classical civilization combines a modicum of Greek or Latin with the study of classical culture, ancient history, and classical art for students who wish to engage with the classical world as broadly as possible. The concentration in classical linguistics is designed for students of a more scientific bent who wish to acquire a knowledge of Greek and Latin at the same time as they essay the formal, rigorous study of language science.

2010-2011 Course Catalog

Required for the classics major
Students may elect to fulfill the requirements of their classics major by concentrating in classical languages and literatures (I), classical civilization (II), or classical linguistics (III), depending on their intellectual interests and postgraduate plans.

1. **Classical Languages and Literatures**
   Classics 110 and 225 or their equivalents, plus 42 units from advanced courses, tutorials, or independent studies in Greek and/or Latin. Students who anticipate doing graduate work in classics should choose this concentration.
2. **Classical Civilization**
   Classics 110 or 225, or its equivalent
   a. Two courses from each of the following three sets of courses:
      i. Classics 150, 160, 280, 300, 310, 510
      ii. Classics 235, 250, 260, 315, Philosophy 200
      iii. Classics 340, 345, 350, 365, 540, ANTH 520
   b. 18 additional units selected either from the courses listed in a., b., and c. above and/or from other courses or tutorials in classics
3. **Classical Linguistics**
   Classics 110 and 225, or their equivalents, and Linguistics 150, plus 18 units from advanced courses or tutorials in classical languages and literatures and 18 additional units from courses or tutorials in linguistics (Linguistics 320, 340, and 510 are especially recommended).

CLASSICS

Required for the Greek and Latin minors

1. Greek: 30 units from language and literature courses plus a six-unit tutorial in the history of Greek literature
   Latin: 30 units from language and literature courses plus a six- unit tutorial in the history of Latin literature
2. C average in the minor

International Study
The curriculum at the "Centro" in Rome is considered to be an integral part of the classics department's program (Please see the Intercollegiate Center for Classical Studies in Rome). The classics programs at the American University of Rome and the College Year in Athens are also affiliated and approved options for study abroad in classics. Consult the department chair for more details.

Foreign language requirement
Students may fulfill the university's foreign language requirement in Latin by taking Classics 230: Introduction to Latin Literature, Classics 389: Topics in Classics, or any 400-level Latin literature course (prerequisites: Classics 110 or 230, Intermediate Latin and Introduction to Latin Literature, respectively), or in Greek by taking Classics 225: Intermediate Greek Reading (prerequisite: Classics 125: Intensive Elementary Greek) or any 400-level Greek literature course.

Humanities requirement
Students may fulfill the university's humanities requirement by taking any classics course taught in English, Classics 230 or 389, or any 400-level course in Greek or Latin literature.

***Senior Experience* in Classics**
The *Senior Experience* in the Department of Classics may be fulfilled in a variety of ways, in consultation with the department chair and the student's advisor. Scholarly, pedagogical, creative, and experiential projects are all viable options. Possible experiences include: writing and defending a senior thesis; delivering a scholarly paper at a conference or as part of Classics Week; staging a production of a Greek or Roman play; developing a complete syllabus and teaching a sample class for a course in Latin or Greek at the secondary level; or working at relevant archaeological sites in Europe and the Mediterranean Sea region. For *Senior Experiences* that take place off-campus, a formal oral presentation will also be required.

Students pursuing double majors, double degrees, and education certification, are strongly encouraged to consult with their advisors and department chairs to plan and negotiate their overall *Senior Experience* as early as possible, especially if they are interested in pursuing an interdisciplinary capstone that integrates their interests in both majors, or combines their student teaching with a project in their major.

CLASSICS

Courses in Latin and Greek

CLAS 100
Beginning Latin
An introductory course for both those with no background in Latin and those who seek a better understanding of the forms and basic syntax of the language. Units: 6.

CLAS 110
Intermediate Latin
A continuation of Classics 100 with readings to develop experience with connected literary discourse. Selections include classical and post-classical prose and poetry. Units: 6.

Prerequisite: CLAS 100 or two years of high school Latin

CLAS 125
Intensive Elementary Greek
An accelerated introductory course emphasizing the basic systematic structure of Greek. Classics 125 and 225 provide students with the ability to read both classical and New Testament Greek. Units: 6.

CLAS 225
Intermediate Greek Reading
A continuation of Classics 125, conducted at a similar pace. Readings from a variety of texts. Successful completion fulfills Lawrence’s foreign language requirement. Units: 6.

Prerequisite: CLAS 125 or its equivalent

CLAS 230
Introduction to Latin Literature
An introduction to the reading and translation of extended passages of Latin literature. Texts to be studied include works of poetry and prose from the late Republic and early Empire. Successful completion satisfies Lawrence's foreign language requirement. Units: 6.

Prerequisite: Satisfactory completion of CLAS 110 or three years of high school Latin

CLAS 389
Topics in Classics
This course examines specific topics in non-literary Greek and Latin texts that augment and enhance our understanding and appreciation of classical antiquity. Texts to be studied may include: the Latin Vulgate text of the New Testament; Roman Imperial inscriptions; Donatus and Priscian on the teaching of Latin in the Middle Ages; Homeric scholia. Units: 6.

Prerequisite: CLAS 110 and/or CLAS 225 or their equivalents, according to the texts assigned in the course

CLASSICS

CLAS 405
Mediaeval Latin
Reading selections include both prose and poetry, emphasize ecclesiastical and intellectual history, and document continuity and change within the Latin language. Units: 6.

Prerequisite: CLAS 110, CLAS 230, or four years of high school Latin

CLAS 410
Ovid
A study of Ovid's poetics as represented in a book of the *Metamorphoses* or the *Ars Amatoria.* Units: 6.

Prerequisite: CLAS 110, CLAS 230, or four years of high school Latin

CLAS 415
Roman Historians
A study of selections from several Roman historians, chosen to emphasize specific historical events and persons depicted on Roman coins in the university's Ottilia Buerger Collection of Ancient and Byzantine Coins. Units: 6.

Prerequisite: CLAS 110, CLAS 230, or four years of high school Latin

CLAS 420
Latin Popular Literature
Readings vary from year to year; past texts have included Augustine's *Confessions* and the *Cena Trimalchionis* of Petronius. Units: 6.

Prerequisite: CLAS 110, CLAS 230, or four years of high school Latin

CLAS 425
Horace and Catullus
Careful reading and concentrated study of selected Horatian odes and Catullan lyrics. Units: 6.

Prerequisite: CLAS 110, CLAS 230, or four years of high school Latin

CLAS 435
Cicero
Close reading of a selection from the works of Cicero. Examples include Pro Caelio, Pro Archia, and the Catilinarian Orations. Units: 6.

Prerequisite: CLAS 110, CLAS 230, or four years of high school Latin

CLAS 440
Virgil
Close reading of extended selections from the works of Virgil, primarily drawn from the Aeneid. Emphasis on Virgil's poetic technique as well as the political and cultural significance of his poetry. Units: 6.

Prerequisite: CLAS 110, CLAS 230, or four years of high school Latin

CLASSICS

CLAS 450
New Testament Greek
Careful reading of the Gospel of John and parallel passages in other Gospels, with special attention to variant manuscript readings. Units: 6.

Prerequisite: CLAS 225 or its equivalent

CLAS 455
Homer
Readings from the *Iliad* and/or *Odyssey.* Units: 6.

Prerequisite: CLAS 225 or its equivalent

CLAS 460
Plato
Close reading of one dialogue in Greek, such as the *Meno, Symposium,* or *Crito,* and of others in translation. Units: 6.

Prerequisite: CLAS 225 or its equivalent

CLAS 465
Greek Drama
A study of selected dramas such as Aeschylus' *Prometheus Bound,* the *Agamemnon* and *Antigone* of Sophocles, and Euripides' *Bacchae* and *Medea.* Units: 6.

Also listed as Theatre Arts 276

Prerequisite: CLAS 225 or its equivalent.

CLAS 480
Greek Historians
Close reading of extended passages from several Greek historians, including Herodotus, Thucydides, and Xenophon. Historical as well as literary and stylistic issues will be considered. Units: 6.

Prerequisite: CLAS 225 or its equivalent

CLASSICS

Courses in classical civilization taught in English

Knowledge of Greek and Latin is not required for the following courses, which are taught in English and which therefore satisfy Lawrence's humanities requirement but not, obviously, the foreign language requirement.

CLAS 150
Survey of Greek History
A study of ancient Greek history from the Bronze Age to 146 B.C. Emphasis on the rise and fall of the Greek city-state as a political, societal, and cultural model. Readings include the historians Herodotus and Thucydides. Units: 6.

Also listed as History 180

CLAS 160
Survey of Roman History
A study of the history of Rome from its origins through the Republic and Empire to 410 A.D. Emphasis on political and cultural developments and the acquisition of empire. Readings may include Livy, Tacitus, Suetonius, and the *Historia Augusta*. Units: 6.

Also listed as History 185

CLAS 235
Ancient Philosphy after Aristotle
A study of three Greek philosophical schools whose world-views were fundamental in the intellectual culture of ancient Rome: the Epicureans, the Stoics, and the Academics. Readings are in English translation and include Lucretius, Cicero, Seneca, Epictetus, and Augustine. Units: 6.

CLAS 250
Classical Mythology
An examination of myths, legends, and folk tales selected from Greek and Roman literature and emphasizing differences in species (human/animal), gender (male/female), and nationality (Greek or Roman/barbarian). Units: 6.

CLAS 260
Classical Literature in Translation
A study of several specific literary texts selected from the corpus of ancient Greek and Latin prose and poetry, read in English translation. Selections vary year to year.

Topic for Winter 2011: Homer, Illiad and Odyssey

Units: 6.

CLASSICS

CLAS 280
Warfare in Classical Antiquity
A study of the practice of warfare in classical antiquity from Homeric Greece to the Roman Empire. Topics to be considered include: Homer's Iliad and the warrior ideal, the political implications of hoplite and trireme warfare, the Persian Wars, the Peloponnesian War, the campaigns of Alexander, Hannibal, and Caesar, the organization and tactics of the Roman legion, and Roman frontier policy. Emphasis on the close interaction of military, political, and cultural developments in Greek and Roman history. Units: 6.

CLAS 300
Periclean Athens
A study of the history of Athens from the end of the Persian Wars to the execution of Socrates (479 TO 399 B.C.). A wide range of material and topics will be considered: social and political developments, warfare, empire, diplomacy, intellectual and cultural life. Emphasis on the revolution in ideas and visions of humanity that defined the golden age of classical Greece. Units: 6.

Also listed as History 235

Prerequisite: Sophomore standing or consent of instructor

CLAS 310
Augustan Rome
An introduction to ancient Rome and Roman civilization, focusing on the Age of Augustus in all its aspects: art, literature, politics, empire, law, entertainment, and society. Emphasis on the political and cultural changes that took place during this revolutionary period. Units: 6.

Also listed as History 240

Prerequisite: Sophomore standing or consent of instructor

CLAS 315
Greek-Islamic Philosophical Tradition
After covering relevant fundamentals in Greek philosophy (Aristotle and Plato), we will proceed to later philosophers, both Greek (the Neoplatonists) and Islamic (Ibn Sina, Suhrawardi), whose work inherits the same methods and questions, Our special focus will be questions about philosophical method, the soul, and mystical experience. Units: 6.

Also listed as Religious Studies 316

Prerequisite: Sophomore standing.

CLASSICS

CLAS 340
Archaic and Classical Greek Art
A study of Greek art and architecture to the end of the fourth century B.C. Topics include the great sanctuaries at Olympia, Delphi, and Athens; the development of mythological narrative in sculpture and vase painting; the political and propagandistic function of Greek art; and the beginning of portraiture. Units: 6.

Also listed as Art History 200

Prerequisite: ARHI 100 or sophomore standing

CLAS 345
From Alexander to Kleopatra: Art of the Hellenistic Age
A study of Greek and Greek-influenced art from the time of Alexander the Great to the Roman conquest of Egypt in 31 B.C. Topics include portraiture and the royal iconography of the Hellenistic rulers, the development of regional styles in sculpture, and the influence of the Romans as patrons. Units: 6.

Also listed as Art History 202

Prerequisite: ARHI 100 or sophomore standing

CLAS 350
Roman Art
A study of the art and architecture of the Etruscans and the Romans to the end of the Roman empire. Topics include the funerary arts of the Etruscans, the art and archaeology of Pompeii and Herculaneum, developments in imperial portraiture and historical relief, technological innovations in architecture, and the beginnings of Christian art. Units: 6.

Also listed as Art History 204

Prerequisite: ARHI 100 or sophomore standing

CLAS 365
Archaeology of the Prehistoric Aegean
A study of archaeological investigations in the Aegean region — Greece, Crete, the Cycladic Islands, and western Turkey. Emphasis on the evidence of cultural development from Palaeolithic hunter-gatherers and Neolithic farmers and herders through the development of the Bronze Age “palace” civilizations of the Minoans and Mycenaeans. Units: 6.

Also listed as Anthropology 324

Prerequisite: ANTH 120 or consent of instructor

CLASSICS

CLAS 500
Medical Language: Origins and Etymologies
An introduction to the origins of medical arts and medical vocabulary in classical antiquity and to the etymological principles governing the history and derivation of medical terminology. Emphasis on specific episodes in the history of medicine and on the Greek and Latin linguistic elements in medical discourse. Units: 6.

Prerequisite: Sophomore standing or consent of instructor

CLAS 510
The Origins of War
A study of the concerns that lead states to war, through analysis of the strategic and diplomatic crises that precipitated two great historical conflicts: the Peloponnesian War in 431 B.C. and the First World War in 1914. Students will regard themselves as diplomats assigned to report on the developing situations. Units: 6.

Also listed as History 510

Prerequisite: Junior standing or consent of instructor

CLAS 520
The Romance Languages and Their Histories
An introduction to the development of Romance languages from Latin. Emphasis on a comparative study of the structures of the modern Romance languages. Taught in English. Units: 6.

Also listed as Spanish 560, Linguistics 510

Prerequisite: Knowledge of Latin or a Romance language beyond the intermediate level or consent of instructor

CLAS 540
Topics in Ancient Art
An examination of a particular topic in ancient art history. Students are expected to carry out independent research. The topic will change periodically. Course may be repeated with the consent of the instructor.

Topic for Winter 2011: Women in Classical Antiquity This course examines the roles of women in ancient Greek, Hellenistic, and Roman societies, using historical, literary, art historical, and archaeological sources. Topics will include these cultures' constructions of gender and the ways in which they affected the relationship of women (and men) to social, religious, political, economic, and legal institutions.

Units: 6.
Also listed as Gender Studies 215, Art History 400

Prerequisite: One course in ancient art, one course in Classics, or consent of the instructor.

CLASSICS

CLAS 545
Advanced Topics in Classics
This course examines specific issues in classical scholarship, ranging from longstanding questions of analysis and interpretation to contemporary topics of research and debate. Students will develop their familiarity with the methods of classical scholarship as they undertake independent work culminating in a research paper or book review. Recommended for majors and students considering graduate study in classics. Units: 6.

Prerequisite: Junior standing

CLAS 390, 590, 690
Tutorial Studies in Classics
Advanced study of topics in Greek and Latin literature, ancient history, ancient philosophy, classical civilization, and/or linguistics, arranged and carried out in cooperation with an instructor. Units: Variable.

Prerequisite: Counter Registration Required.

CLAS 191, 391, 591 691
Directed Study in Classics
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

CLAS 399, 599, 699
Independent Study in Classics
Advanced independent research on topics in Greek and Latin literature, ancient history, ancient philosophy, classical civilization, and/or linguistics, arranged in consultation with the department. Units: Variable.

Prerequisite: Counter Registration Required.

Recent tutorial topics in classics
Aristotle's *Poetics*
Ovid and *Art*
Latin Palaeography and Textual Criticism
Imagery and Madness in Vergil's *Aeneid*
Aristophanes' *Acharnians*
Factional Politics of Julius Caesar

COGNITIVE SCIENCE

Faculty advisors: Gottfried (psychology), Gregg (mathematics, chair Term I), Krebsbach (computer science, chair Terms II and III), Ryckman (philosophy), Williams (education)

Cognitive science is an area of interdisciplinary study that investigates the nature and representation of knowledge, the structure and function of intelligence (natural and artificial), and the relation of mind to brain and machine. In studying cognitive science, students are encouraged to acquaint themselves with insights and methods from a variety of disciplines, including psychology, computer science, linguistics, philosophy, anthropology, and neuroscience.

The interdisciplinary minor in cognitive science is particularly relevant for students interested in experimental psychology, computer science, linguistics, or philosophy. Students interested in other disciplines, such as anthropology, economics, political science, neuroscience, or music theory, may also find cognitive science an important perspective from which to consider their work.

2010-2011 Course Catalog

Requirements for the minor in cognitive science

1. The following three core courses:
    a. Computer Science 470: *Artificial Intelligence* or Computer Science 100: *Exploring Computer Science*, and
    b. Philosophy 410: *Philosophy of Mind*, and
    c. Psychology 340: *Cognitive Psychology*
2. Five additional courses from the following (three of these courses should be in departments other than the student's major):
    - Anthropology 330/Linguistics 330: *Language and Culture*
    - Computer Science 515: *Theory of Computation*
    - Economics 410: *Game Theory and Applications*
    - Education Studies 180/Psychology 180: *Psychology of Learning*
    - Education Studies 345/Anthropology 345/Psychology 345: *Distributed Cognition*
    - Linguistics 150: *Introduction to Linguistics*
    - Linguistics 340: *Introduction to Syntax*
    - Linguistics 350: *Introduction to Phonology*
    - Linguistics 370: *Introduction to Phonetics*
    - Linguistics 470: *Cognitive Linguistics*
    - Philosophy 300: *Epistemology*
    - Philosophy 400/Linguistics 400: *Philosophy of Language*
    - Psychology 260/265: *Developmental Psychology*
    - Psychology 360: *Brain and Behavior I*
    - Psychology 370: *Perception*
    - Psychology 540: *Topics in Psychology of Language*
    - University Course 150: *Issues in Cognitive Science*

COGNITIVE SCIENCE

Courses

ANTH 330
Language and Culture
An examination of language and other cultural symbolic systems used to formulate and communicate meanings. Attention to social factors in language use, including ethnicity, social class, gender, and the nation-state. Some consideration of the ways that language both reflects and influences people's ways of thinking. Units: 6.

Also listed as Linguistics 330

Prerequisite: One anthropology course or one linguistics course, or consent of instructor.

CMSC 100
Exploring Computer Science
An introduction to the ideas, problems, methods, and solutions of computer science. We will emphasize algorithmic thinking and treat computer science *as a science*—investigating issues, at a beginning level, of interest to actual computer scientists. Not intended as preparation for CMSC 250 or 270. Units: 6.

CMSC 470
Artificial Intelligence
A detailed investigation into foundational concepts of artificial intelligence: search, knowledge representation, and automated planning. Specific topics include uninformed and heuristic search techniques, logic-based knowledge representations, automated theorem-proving, logic programming (Prolog), action representations, means-ends analysis, regression and partial-order planning, and reachability analysis using graphs. Units: 6.

Prerequisite: CMSC 270

CMSC 515
Theory of Computation
A study of programming in the abstract, leading to an understanding of the precise nature and limitations of computing machines. Topics include universal computing machines such as Turing machines, decidable and undecidable predicates, regular and pushdown automata, and regular and context-free grammars. Units: 6.

Prerequisite: MATH 300 and CMSC 150

ECON 410
Advanced Game Theory and Applications
This course develops game theory, the science of strategic interaction, *i.e.*, interdependent individuals seeking to promote their self interest, with applications in economics, biology, and philosophy. The mathematical nature of game theoretic models will be reflected in a focus on problem solving. Units: 6.

Prerequisite: ECON 300 and either ECON 225 or consent of instructor

COGNITIVE SCIENCE

EDST 180
Psychology of Learning
An investigation of how people learn. This course examines learning theories (*e.g.,* behavioral, humanistic, cognitive, constructivist) and their implications for the educational process in schools. Other topics include learning and the brain, the nature of expertise, the design of learning environments, and approaches to instruction that promote meaningful learning. Practicum of 20 hours required. Units: 6.

Also listed as Psychology 180

EDST 345
Distributed Cognition
Distributed cognition explores the role of the environment, artifacts, social interaction, and culture in human reasoning, problem-solving, and learning. Domains of study range from the sophisticated (ship navigation) to the everyday (time-telling). Emphasis is placed on studies of cognition in real-world settings. Units: 6.

Also listed as Anthropology 345, Psychology 345

Prerequisite: Sophomore standing

LING 150
Introduction to Linguistics
Introduction to theory and methods of linguistics: universal properties of human language; phonetic, phonological, morphological, syntactic, and semantic structures and analysis; nature and form of grammar. Units: 6.

LING 340
Introduction to Syntax
An introduction to descriptive analysis of morphological and syntactic structures in natural languages with an emphasis on gaining insight into the nature of such structures, rather than on linguistic formalization. Topics include levels of representation, X-bar theory, case theory, thematic roles, the lexicon, grammatical function-changing rules, and head-complement relations. Units: 6.

Prerequisite: LING 150 or consent of instructor

LING 350
Introduction to Phonology
An introduction to the formal study of phonetics, phonemics, and phonological analysis and theory. Topics include stress, syllable structure, tones, metrics, phonotactics, and links between phonology and morphology/syntax; exercises on familiar and unfamiliar languages. Units: 6.

Prerequisite: LING 150 or consent of instructor

COGNITIVE SCIENCE

LING 370
Phonetics
An introduction to the science of speech sounds, focusing on descriptive and experimental studies of articulation and speech acoustics. Laboratory demonstrations of speech production, acoustical analysis, and speech synthesis are combined with lecture/demonstrations to relate phonetics research to theories of phonology and language acquisition. Units: 6.

Also listed as Psychology 375

Prerequisite: LING 150, PSYC 340, or consent of instructor

LING 470
Cognitive Linguistics
Cognitive linguistics is a subfield of linguistics and cognitive science that studies conceptual structure, language, and meaning in relation to general cognitive mechanisms. Topics include cognitive and construction grammars, categorization, construal, image schemas, mental spaces, conceptual metaphors, and conceptual blending. Units: 6.

Prerequisite: LING 150 or consent of instructor

PHIL 300
Epistemology
An examination of some basic questions concerning the nature and extent of human knowledge, focusing on the topics of skepticism, justification, certainty, the *a priori* and the *a posteriori,* and analyses of knowledge. Units: 6.

Prerequisite: One course in philosophy, junior standing, or consent of instructor

PHIL 400
Philosophy of Language
An examination of major theories of meaning, reference, and cognitive content and an attempt to understand how language functions to relate “internal” psychological states to things in the “external” world. Contemporary philosophers are emphasized. Units: 6.

Also listed as Linguistics 400

Prerequisite: One course in philosophy, junior standing, or consent of instructor; PHIL 150 recommended

PHIL 410
Philosophy of Mind
An examination of our common sense conception of mental states and processes and of attempts to answer the question, “Is our common sense conception of mental states and processes compatible with the methods and assumptions of cognitive science?” Units: 6.

Prerequisite: One course in philosophy, PSYC 340, junior standing, or consent of instructor

COGNITIVE SCIENCE

PSYC 260
Developmental Psychology
A study of the development of behavior and mental processes from conception through middle childhood. Topics include prenatal development, attachment, children's language skills, and social and cognitive development. A variety of theoretical perspectives are covered. Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 265
Developmental Psychology
Identical in content to Psychology 260, but requiring a weekly three-hour laboratory that involves systematic work with children to learn and apply assessment techniques and experimental methodologies for the study of development. Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 340
Cognitive Psychology
An investigation of the mental processes involved in the acquisition, organization, and use of knowledge. Information-processing and other approaches are used to study pattern recognition, attention, memory, imagery, problem-solving, and related topics. One laboratory per week involving class demonstrations and experiments. Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 360
Brain and Behavior I
An introduction to the structure and function of the nervous system and its relationship to behavior. Topics include cellular physiology, neuroanatomy, sensory processes, motor control, and neuropharmacology. No laboratory. Units: 6.

Prerequisite: Sophomore standing; at least one biology course recommended

PSYC 370
Perception
An introduction to the physiological and psychological processes by which we receive, transform, and use the information from the world acquired through our senses. Special emphasis on visual and auditory perception to allow a more in-depth study of two perceptual systems and to provide information useful to those interested in the visual arts and music. Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 540
Topics in the Psychology of Language
An examination of the nature and structure of language, integrating knowledge from linguistics, psychology, neurophysiology, and sociology. Focus on the psychological theories and experimental evidence about language production and perception. Units: 6.

Also listed as Linguistics 450 Prerequisite: PSYC 340, LING 150, or consent of instructor

COMPUTER SCIENCE

Professor: Evans* (Chemistry)
Associate professors: Gregg**, Krebsbach

* On leave Term(s) II; ** On leave Term(s) III

The mathematics department, with other members of the faculty, coordinates computer science. The interdisciplinary mathematics-computer science major offers students an opportunity to combine these two disciplines, enriching both.

Computer science combines an empirical aspect — which involves implementing specific algorithms — with a theoretical aspect — which involves analysis of abstract processes using methods of applied mathematics. Both aspects of the discipline contribute to understanding what problems are amenable to computer solution and what methods are optimal.

Today, computing importantly serves academic research no less than commercial enterprise. Moreover, a disciplined exposure to computer science within the context of studies in liberal arts and sciences fosters in the student the development of clarity and precision in analysis, logic, and expression.

Prospective engineers will find that entry to computer engineering curricula can be coordinated through Lawrence's cooperative 3-2 program with engineering schools, usually with a Lawrence major in physics, mathematics, or mathematics-computer science (see Cooperative Degree Programs).

Computing facilities on campus are abundant, offering students the opportunity to work with all major operating systems and programming languages.

2010-2011 Course Catalog

Required for the interdisciplinary mathematics-computer science major

1. The core sequence: Mathematics 140, 150, 160 and Computer Science 150, 250, and 270
2. Mathematics 220 and 300
3. Computer Science 460, 510, and 515
4. 6 additional units in mathematics courses selected from among Mathematics 310, 420, 525, and 540
5. 6 additional units in a computer science course numbered 400 or above
6. 6 additional units in a computer science course numbered 400 or above or selected from among Mathematics 310, 420, 525, and 540
7. Completion of an independent study project prior to the Spring Term of the senior year
8. Computer Science 600 in the senior year

In choosing electives: Mathematics 420 and 525 are recommended. Computer Science 430 or 440 is recommended for students considering a technical career or graduate study in computer science. Computer Science 410 is recommended for those considering careers in management information science. Physics 220 is recommended for students considering pre-engineering.

COMPUTER SCIENCE

Required for the computer science minor

1. Mathematics 140, 150, and 160
2. Mathematics 210 or 220
3. Computer Science 150 and 270
4. 18 additional units in computer science courses numbered 250 or above, one of which must be numbered 400 or above
5. C average in the minor

Tutorials
No tutorials are given for courses routinely offered, and the department does not normally permiet a tutorial to satisfy a major or minor requirement for graduation

Placement Advanced placement and six units of Lawrence credit (for Computer Science 150) may be obtained by scoring 4 or 5 on the A or AB computer science exam administered by the College Board. Consult the department for details and proper placement.

***Senior Experience* in Mathematics-Computer Science**
The mathematics department's *Senior Experience* consists of a 6-unit (typically one-term) independent study project completed in the senior year. The project must demonstrate the capacity to learn mathematics (or statistics) independently or to utilize mathematics or mathematical technique as an innovative or substantive part of a larger project.
Interdisciplinary mathematics-computer science majors must complete their independent study project in two parts: an independent study in the fall or winter term of the senior year (usually 3 units), followed by a presentation of their results in the winter term Computer Science Senior Seminar (3 units).
For mathematics and mathematics-computer science majors, the project must be approved and supervised by a faculty member in the mathematics department. Students should consult with departmental members in the spring before their senior year, in order to plan appropriately for their Senior Experience.

Courses

CMSC 100
Exploring Computer Science
An introduction to the ideas, problems, methods, and solutions of computer science. We will emphasize algorithmic thinking and treat computer science *as a science*—investigating issues, at a beginning level, of interest to actual computer scientists. Not intended as preparation for CMSC 250 or 270. Units: 6.

CMSC 110
Introduction to Scientific Programming
An introduction to computer programming with an emphasis on numerical applications in mathematics and the sciences. Topics include elementary programming concepts in the C language, design and implementation of numerical algorithms, and an introduction to symbolic computation. Units: 6.

Prerequisite: One term of calculus (either MATH 140 or MATH 120), or consent of instructor

COMPUTER SCIENCE

CMSC 150
Introduction to Computer Science
An introduction to computer programming for potential mathematics/computer science majors and other students with a strong interest in computing. Topics include elementary programming constructs, design and implementation of algorithms, and object-oriented programming. Introductory instruction in the Java language. Units: 6.

CMSC 165
WWII Codebreaking: The First Computer Application
A historically-situated lesson in an early application of computer science: the successful Allied codebreaking effort of the second World War. General principles of computer science will complement specific algorithms for encrypting and decrypting secret messages to enable students to understand the remarkable accomplishments of Alan Turing and the London-based British and American codebreaking teams. Units: 6.

CMSC 175
The Philosophy of Artificial Intelligence
Alan Turing first asked “Can machines think?” eight years before the term “artificial intelligence” was coined in America. By considering concepts and techniques of AI developed over the past sixty years, as well as evaluating alternative “theories of mind,” we will seek satisfactory definitions for “machine” and “think” en route to answering Turing’s intriguing question. Units: 6.

CMSC 250
Intermediate Programming Concepts
A study of more advanced programming techniques in the Java language. Topics include graphical user interfaces, exception-handling, multithreading, networking, databases, and web applications. Units: 6.

Prerequisite: CMSC 150

CMSC 270
Introduction to Data Structures
A study of advanced programming and an introduction to data structures. Topics focus on programming skills needed for the design and implementation of standard data structures such as lists, trees, and graphs and their associated algorithms. Additional topics include recursion, analysis of algorithms, and advanced aspects of object-oriented programming in the C++ language. Units: 6.

Prerequisite: CMSC 150

CMSC 410
Systems Analysis and Design
An introduction to techniques for analyzing and modeling systems for implementation as computer programs. Topics include a survey of modeling methodologies for structured and object-oriented systems and case studies of system development. Also, applications of analysis and design methods to database design and design of distributed systems. Units: 6.

Prerequisite: CMSC 250

COMPUTER SCIENCE

CMSC 420
Computer Graphics
The fundamentals of computer graphics and their applications in visualizing a variety of scientific phenomena. Topics include graphics primitives, two- and three-dimensional transformations, three-dimensional viewing techniques, spline curves, surface patches, hidden line algorithms, ray tracing, radiosity, texture-mapping, and fractals. Units: 6.

Prerequisite: MATH 140 and CMSC 270

CMSC 430
Hardware Organization
The structure and function of computers from a perspective midway between that of the electronic circuit designer (see Physics 220) and that of the assembly language programmer (see Computer Science 440). Topics include elementary digital logic, data storage devices, data flow pathways, and examples of central processor organization that illustrate micro-programming, pipelining, parallelism, and reduced instruction sets. Units: 6.

Prerequisite: CMSC 270 or consent of instructor

CMSC 440
Computer Architecture
A study of computers and their system software at the level of abstraction of an architecture defined by an assembly language. Topics include instruction sets, addressing techniques, and program control mechanisms; subroutines, procedures, and macros; representation and manipulation of numeric and string data; assemblers, linkers, run-time libraries, and debugging aids. Units: 6.

Prerequisite: CMSC 270 or consent of instructor; MATH 220 recommended

CMSC 450
Operating Systems
The basic principles of operating systems: implementation of multitasking systems; control and coordination of concurrent tasks, deadlocks, synchronization, mutual exclusion; storage management, segmentation, paging, virtual memory, protection, sharing, access control, file systems; resource management; evaluation and prediction of performance by both theoretical and experimental means. Units: 6.

Prerequisite: CMSC 270 or consent of instructor

CMSC 460
Programming Languages
An examination of issues in the design and implementation of programming languages. Students will first gain proficiency in the functional programming paradigm (using Scheme), and will then design and implement, in Scheme, an interpreter for a brand-new programming language. Units: 6.

Prerequisite: CMSC 270

COMPUTER SCIENCE

CMSC 470
Artificial Intelligence
A detailed investigation into foundational concepts of artificial intelligence: search, knowledge representation, and automated planning. Specific topics include uninformed and heuristic search techniques, logic-based knowledge representations, automated theorem-proving, logic programming (Prolog), action representations, means-ends analysis, regression and partial-order planning, and reachability analysis using graphs. Units: 6.

Prerequisite: CMSC 270

CMSC 510
Data Structures and Algorithm Analysis
Advanced data structures and the time and space efficiency of the algorithms that manipulate such structures. Topics include proof of correctness for algorithms, recursion, dynamic programming, optimized tree structures, union-find problems, graphs, path-finding algorithms, and string search algorithms. Units: 6.

Prerequisite: CMSC 270 and MATH 220

CMSC 515
Theory of Computation
A study of programming in the abstract, leading to an understanding of the precise nature and limitations of computing machines. Topics include universal computing machines such as Turing machines, decidable and undecidable predicates, regular and pushdown automata, and regular and context-free grammars. Units: 6.

Prerequisite: MATH 300 and CMSC 150

CMSC 550
Advanced Topics in Computing
An exploration of selected advanced computing techniques such as constraint logic, continuation-passing, production systems, declarative knowledge representations, macros, scripting, robot programming, and lazy evaluation, to name a few. The choice of topics for any given term will vary according to the interest of the students and faculty. Units: 6.

Prerequisite: CMSC 270

CMSC 600
Computer Science Senior Seminar
Intended as a capstone experience for math-computer science majors, this course provides a forum for seniors to formally present the results of their required independent study projects. CMSC minors and other students doing senior projects involving computing are also invited to present their work in this seminar. Units: 3.

CMSC 390, 590, 690
Tutorial Studies in Computer Science
Units: Variable.

Prerequisite: Counter Registration Required.

COMPUTER SCIENCE

CMSC 191, 391, 591, 691
Directed Study in Computer Science
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

CMSC 195, 395, 595, 695
Units: Variable.

CMSC 399, 599, 699
Independent Study in Computer Science
Units: Variable.

Prerequisite: Counter Registration Required.

EAST ASIAN STUDIES

Professor: Orr (Art and Art History)
Associate professors: Sung (Chinese and Japanese), Vorenkamp (Religious Studies), Yang (Chinese and Japanese, chair)
Assistant professors: Jenike (Anthropology), Tsomu (History)

The Program in East Asian Studies is dedicated to the study of the civilizations, cultures, and contemporary importance of East Asia. The rich cultural heritages and the political and economic significance of the region are covered by courses in anthropology, government, literature, and religious studies.

2010-2011 Course Catalog

Required for the major in East Asian studies
Twelve courses as follows:

1. a. Six terms of Chinese language: CHJA 101, 102, 201, 202, 203, 301 or
   b. Six terms of Japanese language: CHJA 111, 112, 211, 212, 213, and 311
2. EAST 140: *Traditional East Asian Civilization*
   EAST 150: *Modern East Asian Civilization*
3. Two courses selected from the following:
   - EAST 175: *Introduction to the Arts of China and Japan*
   - EAST 216: *Buddhism in China and Japan*
   - EAST 260: *East Asian Classics in Translation*
   - EAST 265: *Introduction to Japanese Language and Culture*
   - EAST 310: *Introduction to East Asian Linguistics*
   - EAST 350: *Modern Chinese Literature and Cinema in Translation*
   - EAST 364: *Ethnography of East Asia*
   - EAST 366: *Ethnography of Japan*
   - EAST 420: *Contemporary China*
   - EAST 445: *Chinese Government and Politics*
   - EAST 510: *Seminar in Zen Buddhism*
   - EAST 520: *Seminar in Chinese Literature*
4. One course that situates East Asian culture in a broader international context, such as:
   - GOVT 245: *Politics of Developing Countries*
   - GOVT 340: *International Politics*
   - GOVT 480: *International Organizations*
   - HIST 295: *Nationalism in the Modern World*

   Students should consult with the EAST chair to select a course appropriate to their interests.

5. EAST 699: *A senior-level independent study (6 units) resulting in the completion of a substantial research paper or project.*

   In addition to the requirements listed above, majors are encouraged to further strengthen their Chinese or Japanese language skills by studying in China or Japan (please see "Off-Campus Programs,") and/or in one of several intensive summer language programs offered in the U.S.

Students with prior background in Chinese or Japanese who place out of the first-year sequence of courses are required to complete additional language study for the major — either at Lawrence, abroad, or in a summer language program — at the discretion of the program director.

Required for the minor in East Asian studies

1. Five courses, as follows:
    a. EAST 140: *Traditional East Asian Civilization*
    b. EAST 150: *Modern East Asian Civilization*
    c. Three courses from among the following:
        - EAST 175: *Introduction to the Arts of China and Japan*
        - EAST 216: *Buddhism in China and Japan*
        - EAST 260: *East Asian Classics in Translation*
        - EAST 265: *Introduction to Japanese Language and Culture*
        - EAST 310: *Introduction to East Asian Linguistics*
        - EAST 350: *Modern Chinese Literature and Cinema in Translation*
        - EAST 364: *Ethnography of East Asia*
        - EAST 366: *Ethnography of Japan*
        - EAST 420: *Contemporary China*
        - EAST 445: *Chinese Government and Politics*
        - EAST 520: *Seminar in Chinese Literature*
2. One additional advanced course on East Asia that builds on coursework already taken
3. An independent study in an area of interest
4. C average in the minor

***Senior Experience* in East Asian Studies**
EAST 699: A senior level one-term independent study (6 units) culminating in the completion of a substantial paper or project derived from previous coursework in the discipline or related fields or field experience in consultation with department faculty.
Students with sufficiently advanced Chinese or Japanese language skills are encouraged to use some target language sources in carrying out their research. Students must share the results of their work in a public forum prior to graduation.

EAST ASIAN STUDIES

Courses

EAST 140
Traditional East Asian Civilization
An introductory survey of East Asia from the dawn of indigenous civilization to the 16th century. Focus on the growth of a Sinitic center and its interaction with the sedentary and nomadic peoples on its Inner Asian and Pacific rims. Emphasis on the diverse peoples and societies of the area and the historical processes that bound them together through a common tradition. Units: 6.

Also listed as History 160, Ethnic Studies 121

EAST 150
Modern East Asian Civilization
An introductory survey of the modern history of East Asia, examining the efforts of traditional states, particularly China and Japan, to respond to Western intrusion into the region after 1600. Focus on social and cultural problems created by attempts to modernize yet defend tradition and on the differing results of Chinese and Japanese approaches. Units: 6.

Also listed as History 165

EAST 175
Introduction to the Arts of China and Japan
An introductory survey of the traditional arts of China and Japan from prehistoric times until the beginning of the modern era. The course will examine representative examples of painting, sculpture, architecture, garden designs, and the decorative arts in the context of religious practices and historical developments. Units: 6.

Also listed as Art History 175

EAST 216
Buddhism in China and Japan
An introductory survey of Buddhist thought and practice in China and Japan. The history of key Buddhist concepts and schools in East Asia is the primary focus. Readings include translations from East Asian Buddhist canonical works. Units: 6.

Also listed as Religious Studies 216

EAST 255
Special Topics in Ceramics: Asian Craft and Design
A combination of research and studio practice. Through slide lectures, readings, and discussions, this course will survey the historical development of traditional through contemporary crafts and design in China, Korea, and Japan and focus on the diverse craft customs of Japan in particular. Emphasis will be placed on independent research to develop ideas and critical thinking and on building a variety of ceramic skills to achieve a personal body of work. Units: 6.

Also listed as Studio Art 255

Prerequisite: ART 100 or ART 110; ARHI 175 recommended

EAST ASIAN STUDIES

EAST 260
East Asian Classics in Translation
This introductory course explores encounters with nature in East Asian texts through close reading of primary texts in English translation—Taoist philosophy, lyric poetry, personal memoirs, fiction and film—from the traditional periods of China and Japan, ending with a contemporary Japanese novel set in 1980s suburban Tokyo. Particular attention is paid to literary form, voice, aesthetic concerns, and issues relating to humans' relationship with nature. Units: 6.

Also listed as Environmental Studies 206, Chinese and Japanese 260

Prerequisite: Sophomore standing; EAST 140 recommended

EAST 265
Introduction to Japanese Language and Culture
A survey introducing major characteristics of Japanese language with reference to the structure of Japanese society. Topics include honorifics, use of pronouns, loan words, age and gender differences in the language. The course will also familiarize students with various aspects of traditional and contemporary Japanese culture. Units: 6.

Also listed as Chinese and Japanese 265, Linguistics 265

Prerequisite: Sophomore standing; CHJA 112 recommended

EAST 310
Introduction to East Asian Linguistics
Survey of genetic, regional, and typological classification of East Asian languages; writing systems for Chinese, Japanese, Korean, and Tibetan languages; descriptive and comparative analyses of phonological, morphological, and syntactic structures of East Asian languages. More than one language may be investigated in detail. Units: 6.

Also listed as Chinese and Japanese 310, Linguistics 310

Prerequisite: LING 150 and sophomore standing

EAST 350
Modern Chinese Literature and Cinema in Translation
A survey of 20th-century Chinese fiction and cinema. Iconoclastic works of modern Chinese vernacular fiction from 1919 through the post-Cultural Revolution (1966-1976) will be juxtaposed alongside films dealing with the same period, such as *Red Sorghum* (1987) and *Farewell, My Concubine* (1992) made by the so-called Fifth Generation of film directors (born after 1949, when the People's Republic was founded). Class conducted in English. No knowledge of Chinese required. Units: 6.

Also listed as Chinese and Japanese 350, Film Studies 350

Prerequisite: Sophomore standing; EAST 150 recommended

EAST ASIAN STUDIES

EAST 358
Race and Ethnicity in East Asia
This course will explore the use of the concepts of race and ethnicity in China and Japan to show how identity is constructed and used in forging national identity. The course will also examine transnationalism and the formation and articulation of ethnicity in East Asia. Units: 6.

Also listed as History 358, Ethnic Studies 334

Prerequisite: Sophomore standing

EAST 359
Introduction to Tibetan Culture and History
This course seeks to provide an introduction to Tibetan civlization and its history from its earliest recorded origins to the present. The course examines what civilizational forces shaped Tibet; the religious/cultural life of Tibet will be central to our study. Thematic topics, such as the economy and material culture, structures of power and legal codes will be examined in each chronological period. Units: 6.

Also listed as History 359

Prerequisite: Sophomore standing

EAST 364
Ethnography of East Asia
A critical and comparative examination of key areas of sociocultural change in present-day East Asia. What do we mean when we speak of "tradition" in the East Asian context? Does tradition refer to an imagined past, or to actual practices that have been discarded in response to demographic, economic or political forces? Using ethnographic studies, we will see how society shapes assumed realms of private experience in Japan, China, and South Korea such as gender, identity, work, and the family, and how these realms of private experience are undergoing marked change. We will then address new areas of research in East Asian anthropology such as the body politic, sexuality, pop culture, consumption and national cultural identities. Units: 6.

Also listed as Anthropology 364

Prerequisite: ANTH 110 or consent of the instructor

EAST 366
Ethnography of Japan
Critical examination of social and cultural (re)presentations of Japan from the postwar to the postmodern. Exploration of diversities of lived reality and social change in contemporary Japan. Topics include: nationalism and historical consciousness, family and gender ideologies, invisible and visible others, sexuality, pop culture, and the Heisei recession. Units: 6.

Also listed as Anthropology 366

EAST ASIAN STUDIES

EAST 410
Chinese Government and Politics
This survey course examines the political development of China from the Communist revolution to the present. Among the issues addressed are the legacies of the Maoist era, China's contemporary economic transformation and its social effects, political participation and protest in the contemporary era and the apparent perpetuation of authoritarianism. Units: 6.

Also listed as Government 445

Prerequisite: Junior standing and one of EAST 150, GOVT 245, or HIST 360; or consent of the instructor

EAST 420
Contemporary China
A discussion course on selected issues in the social and cultural history of modern China. Literature, films, documents, and historical studies are examined to explore the intimate side of personal, family, and social life and the nature and impact of social and cultural changes in 20th-century China. Units: 6.

Also listed as History 360

Prerequisite: Sophomore standing or consent of instructor; HIST 165 recommended

EAST 491
Borderlands in Modern East and Inner Asia: History, Culture, and Identity
Seminar on Euro-Asian borderlands, with a focus on East Asia during the Modern Period. Adopting a transnational approach, the course examines the fluidity of the concept of the "frontier," along with various understandings of what borderlands are, from the perspective of both indigenous peoples and those from afar. Units: 6.

Also listed as History 491

Prerequisite: Junior standing or consent of instructor

EAST 510
Seminar on Zen Buddhism
Zen Buddhism is perhaps the most widely known form of Buddhism in the West and also the most widely misunderstood. This course provides a detailed look at the history and doctrines of Zen Buddhism in China and Japan. Combining the use of original source materials (in translation) with an emphasis on intellectual history, the course covers specific doctrines that have differentiated the major schools of Zen. Units: 6.

Also listed as Religious Studies 510

Prerequisite: RLST 220 or RLST 216

EAST ASIAN STUDIES

EAST 520
Seminar in Chinese Literature
An introduction to some of China's greatest literary texts of a single genre, period, author, or theme. Issues addressed include gender relations, responses to traditional roles, and the development of fiction in China. Knowledge of Chinese not required. Advanced students of Chinese language may take concurrently CHJA 391 or CHJA 591, for three units, and work with the instructor to read excerpts in the original Chinese. Units: 6.

Also listed as Chinese and Japanese 520

Prerequisite: Sophomore standing; EAST 140 recommended

EAST 390, 590, 690
Tutorial Studies in East Asian Studies
Individualized advanced study under regular staff direction on topics not covered in lower-level courses. Units: Variable.

Prerequisite: Counter Registration Required.

EAST 391, 591, 691
Directed Study in East Asian Studies
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

EAST 699
Independent Study in East Asian Studies
Individualized advanced research under staff guidance to prepare a substantial paper, usually for submission for honors. Units: Variable.

Prerequisite: Counter Registration Required.

ECONOMICS

Professors: Azzi, Finkler** (The John R. Kimberly Distinguished Professorship in the American Economic System, chair terms I and III)
Associate professors: Gerard, LaRocque
Assistant professors: Galambos* (chair term II), Karagyozova
No-rankname: Vaughan

* On leave Term(s) II; ** On leave Term(s) III

Almost all choices, whether of individuals, groups, organizations, or societies, involve evaluating trade-offs. Trade-offs exist for managers of corporations facing bankruptcy risks, non-profit organizations facing public apathy, governmental agencies facing voter interests and bureaucratic constraints, and households facing family crises. Economics is the study of trade-offs, especially as they arise from human desires, limitations, opportunities, and incentives. Training in economics is useful whether you want to change the world, become rich, or obtain a better understanding of human behavior.

Students of economics at Lawrence first acquire a basic knowledge of economic theories, principles, and techniques of analysis. They then apply them to a wide range of problems, from poverty and discrimination to macroeconomic stabilization policy and even to environmental degradation. Students learn early on that modern economics is an application of mathematical modeling to the study of human behavior.

The interdisciplinary mathematics-economics major is a mathematics-rich major designed as a strong foundation for graduate work in economics. The professional economist needs a strong foundation in mathematics. It has also been well-received in technical business careers, such as investment banking, management consulting, and finance.

2010-2011 Course Catalog

Required for the economics major

1. Economics 100 or 120
2. Mathematics 140 or both Mathematics 120 and 130; Mathematics 207
3. Intermediate Theory
    a. Economics 300
    b. Economics 320
    c. Economics 380

    (Majors must take all three courses prior to completion of the junior year. The department must approve any exception.)

4. Five additional six-unit courses numbered 200 or higher, three of which must be numbered 400-699.
    (Only one tutorial or independent study may count as one of these five courses.)
5. The grade-point average for the major will be computed from economics courses and from required mathematics courses. A C average is required.

ECONOMICS

Required for the interdisciplinary mathematics-economics major
The mathematics component of the major is:

1. Mathematics 140, 150, 160, 207, 300, and 310
2. Either Mathematics 435 or 445 and 6 units in a mathematics course numbered 400 or above, with 435, 440, 445, or 560 recommended

The economics component of the major is:

1. Economics 100 or 120
2. Economics 300, 320, and 380
   (Majors must take all three courses prior to completion of the junior year. The department must approve any exception.)
3. Any three six-unit courses numbered between 400 and 580 with Economics 500 and 520 recommended

The interdisciplinary component of the major is:

1. Completion of an independent study project that has been approved by both departments.
2. A major must have an advisor in each department.

Required for the economics minor

1. Economics 100 or Economics 300 (both microeconomics)
2. Economics 120 or Economics 320 (both macroeconomics)
3. Five additional six-unit courses, at least four of which must be economics courses numbered 200 or above and one that could be a mathematics course.

   (Only one tutorial or independent study may count as one of these five courses.)

4. C average in the minor

Recommendations
Recommendations For the student intending one course Economics 120 is especially appropriate for the student who intends to take only one economics course. For the student interested in taking more than one course, especially if considering a degree in economics Economics 100 is the appropriate starting point.

For the economics or mathematics-economics major

· Adopt an advisor in the Department of Economics as soon as possible and speak to your advisor about the selection of a coherent set of electives.
· Take Mathematics 140 or 120 and 130 as soon as possible. Mathematics 150 and 160 are also recommended.
· Take Economics 100, a 200-level economics course, and then Economics 300.
· Take Economics 300 early if you have done well in its prerequisites.
· If a student does not meet one or more pre-requisites for any course, he or she must explicitly obtain consent of instructor.

ECONOMICS

Students preparing for graduate work in economics, public policy, or business or those preparing for an MBA. in a quantitative field should plan to take a number of mathematics courses and should consult the economics faculty for advice. The mathematics-economics major is particularly well-suited for these students. Furthermore, students should take Economics 500 and Economics 520 as part of their preparation.

Economics majors anticipating a career in secondary-school teaching should check state certification requirements

Course structure and numbering
The 100-level introductory courses are theory-based survey courses. Economics 100 is the best preparation for taking other economics courses, and most courses at the 200 level require only Economics 100. Economics 120 is an alternative to Economics 100, but it is not an adequate preparation for some 200-level courses.
The 200-level courses apply basic theory to particular fields of inquiry. Contingent on basic 100-level preparation, the economics department strives to make the 200-level courses accessible to as many students as possible.
The 300-level courses are intermediate theory courses geared toward economics majors, while the 400-level courses are advanced applications classes. The 500-level courses are graduate-school preparatory courses.

***Senior Experience* in Economics**
The economics curriculum culminates with a one-term *Senior Experience* in which the student produces a well-researched paper consistent with the standards of the profession. Students must enroll in a course that offers the senior experience independent study option. An entrepreneurial project may also be approved as a senior experience after early and in-depth consultation with the department chair and the student's advisor.

Students pursuing double majors, double degrees, and education certification, are strongly encouraged to consult with their advisors and relevant department chairs to plan and negotiate their overall senior experience as early as possible, especially if they are interested in pursuing an interdisciplinary capstone that integrates their interests in both majors, or combines their student teaching with a project in their major.

Interdisciplinary mathematics-economics (economics-mathematics) majors may choose to meet their *Senior Experience* requirement by taking the above workshop or by satisfying the Department of Mathematics' requirement. In either case, they will need to demonstrate the ability to combine topics in both disciplines – bringing appropriate techniques of mathematics or statistics to bear on the study of economics, or learning mathematics or statistics suggested by models in economics. Students who plan to complete this interdisciplinary major must have their Senior Experience proposal approved by one advisor in the Department of Mathematics and one in the Department of Economics prior to the term in which they plan to complete the experience.

ECONOMICS

Courses

ECON 100
Introductory Microeconomics
A first course in economics focusing on the basic analytical framework used by contemporary economists. The central topics typically include supply and demand, market competition, market power, incomplete markets (e.g., externalities and public goods), trade, and taxation. Classroom experiments are frequently employed to develop economic intuition. Especially appropriate for students who intend to take additional courses in economics. Units: 6.

ECON 120
Introductory Macroeconomics
A study of the principles, concepts, and methods of economic analysis, with a theoretical focus on the determination of national income. Special attention given to governmental expenditure and taxation, monetary policy, inflation, and unemployment. Especially appropriate for those who only want to take one economics course. Units: 6.

ECON 170
Financial Accounting
A study of accounting principles and procedures, leading to a review of financial statements and to an understanding of how accounting data are used to analyze business and economic activities. Units: 6.

Prerequisite: Sophomore standing

ECON 180
Entrepreneurship in the Arts and Society
A broad introduction to entrepreneurship for students in the arts, humanities, and social sciences. This course aspires to give students the tools and the mindset to become agents of innovative, entrepreneurial change, social entrepreneurs or entrepreneurial artists. After presenting a social science view of entrepreneurship, the course will feature faculty from a variety of disciplines as well as practitioners. Units: 6.

Prerequisite: Junior or senior standing

ECON 200
Economic Development
This course seeks to provide students with a broad based understanding of economic development and the choices countries face. To obtain such an understanding, students will read the works of contemporary economists who provide a variety of approaches to poverty alleviation and the tradeoffs that must be confronted. Emphasis will be placed on close reading, class discussion, and on writing a number of papers that compare and contrast different views of economic development. Units: 6.

Also listed as Government 276

Prerequisite: ECON 100 or 120

ECONOMICS

ECON 202
Global Economic Relations
This course covers the major concepts utilized in the field of international political economy. Major issues covered include globalization, monetary policy, trade policy, and the role of international institutions such as the WTO. Units: 6.

Also listed as Government 275

Prerequisite: ECON 100 or ECON 120

ECON 205
Topics in International Economics
The first portion of the course introduces students to the major theoretical foundations and empirical research on international trade. The second portion of the course uses an open economy macroeconomic framework to explain the balance of payments, various exchange rate regimes, and the role of government. Units: 6.

Prerequisite: ECON 100 and ECON 120

ECON 211
In Pursuit of Innovation
This course acquaints students with innovation—its objectives, major characteristics, and likely origins. The course focuses mainly on scientific and /or technological innovation; it will be taught as a joint physics/economics offering. The course will include one or two lectures per week along with student presentations and hard-charging discussion based on readings from books, articles and case studies. Outside resource individuals (in most cases Lawrence alumni) who are well-placed and experienced in innovation will offer advice and guidance to particular student projects. Units: 6.

Also listed as Physics 201

Prerequisite: Two courses in mathematics, or two courses in physics, or two courses in economics, or consent of instructor

ECON 215
Comparative Economic Systems
This course introduces students to the different ways societies have organized economic activity in the past and in the present as well as to how economic and social policy questions are addressed under these different arrangements. Students will study the economies of the Western world, the former Soviet bloc countries, and Asian countries at various stages of economic development. Units: 6.

Prerequisite: ECON 100 or ECON 120

ECONOMICS

ECON 220
Corporate Finance
An analysis of financial decisions made by firms and the nature of the stock and bond markets from which they fund operations. Topics include financing decisions, capital budgeting decisions under certainty and risk, stock and bond market's efficiency and bubbles, dividend policy, and debt/equity capital structure. Units: 6.

Prerequisite: ECON 100 or ECON 120, and sophomore standing

ECON 225
Game Theory and Applicatons
Game theory studies interactions involving strategic interdependence, i.e. situations in which the outcomes for a particular participant involved depend not only on his or her choices but also on choices of others. After a thorough introduction to game theory, applications to economics, politics and other fields will be presented. Units: 6.

Prerequisite: ECON 100 or ECON 120

ECON 240
Political Economy of Regulation
This course focuses on the tension between politics and expertise that characterize the administrative regulatory state often called "the fourth branch of government." Several competing models of political economy shape an exploration of the continuing evolution of the U.S. regulatory system, the process by which regulations are proposed, written, implemented, and enforced, and the tools used to evaluate the costs and benefits of regulations. Units: 6.

Also listed as Government 277

Prerequisite: ECON 100 or ECON 120

ECON 250
Urban Economics
A study of the development of the urban economy focusing on the interaction among business, household, and governmental decisions that affect the allocation of land. Each offering will apply microeconomic economic analysis to one or more public policy topics, such as urban sprawl, urban economic growth, housing, education, transportation, or crime. Units: 6.

Prerequisite: ECON 100

ECON 270
Public Economics
Public economics covers a range of topics from taxation to social insurance and redistribution to homeland security. The course develops a template for framing and analyzing public policy issues that provides a basis for understanding the rationale for government intervention, the alternative policy instruments that can be used to affect economic outcomes, and the economic tools used to evaluate the effects of intervention. Units: 6.

Also listed as Government 278

Prerequisite: ECON 100

ECONOMICS

ECON 271
Public Economics
Public economics covers a range of topics from taxation to social insurance and redistribution to homeland security. The course develops a template for framing and analyzing public policy issues that provides a basis for understanding the rationale for government intervention, the alternative policy instruments that can be used to affect economic outcomes, and the economic tools used to evaluate the effects of intervention. Units: 6.

Also listed as Government 274

Prerequisite: ECON 100 or ECON 120

ECON 280
Environmental Economics
The course shows how economists analyze environmental problems and the types of solutions they propose (if any). Topic coverage includes property rights and externalities, cost-benefit analysis, regulatory policy instruments, the interplay between policy and innovation, and basic models of political economy. Units: 6.

Also listed as Environmental Studies 280

Prerequisite: ECON 100; sophomore standing recommended

ECON 285
Natural Resource Economics
This course explores the economics of both exhaustible and renewable natural resource extraction. Topics include oil and mineral extraction, fisheries, forest and water management, and biodiversity. The course includes extensive study of current issues associated with the use of natural resources through a group project Units: 6.

Also listed as Environmental Studies 285

Prerequisite: ECON 100; sophomore standing recommended

ECON 290
The Economics of Medical Care
An analysis of how the economic organization of medical care affects the health and well-being of the population. Topics include who is treated, how much the treatment costs, and who pays the bill. Particular emphasis given to the roles of insurance and various national health policies and reform proposals. Units: 6.

Also listed as Biomedical Ethics 290

Prerequisite: ECON 100 or ECON 120

ECONOMICS

ECON 300
Microeconomic Theory
A study of the microeconomic foundations of economics. The course focuses on gaining a strong understanding of consumers, firms, and the equilibria in a perfectly competitive economy, with an introduction to microeconomic models that feature market power, externalities, and asymmetric information, the most significant deviations from perfect competition. Units: 6.

Prerequisite: ECON 100 and MATH 140 (recommended) or MATH 130

ECON 320
Macroeconomic Theory
An exploration of contemporary theories of employment, income, inflation, and stabilization as regards the United States and other industrialized countries. Emphasis on the application of models to foster understanding of macroeconomic policy. Units: 6.

Prerequisite: ECON 100 or 120, MATH 130 or 140. ECON 300 is recommended

ECON 330
History of Economic Thought
The course examines the origins and development of ideas pertaining to production and distribution of goods and services in ancient to modern civilizations. Special attention will be devoted to ideas (and their authors as well as their critics) that led to the emergence of market-oriented societies. Units: 6.

Prerequisite: ECON 100 or ECON 120

ECON 380
Econometrics
Statistical techniques and statistical problems applicable to economics, focusing on ordinary least-squares regression, classical inference, and detections of and adjustments for violations of the Classical Assumptions. Units: 6.

Prerequisite: MATH 207, either ECON 100 or 120, plus at least one other applied economics course at the 200 level or higher

ECON 400
Industrial Organization
Industrial organization is the study of how markets are structured and why it matters. The course begins with the standard applied microeconomic treatment of economic regulation (*e.g.*, antitrust, natural monopoly, advertising restrictions) and then explores disequilibrating phenomena, including entrepreneurship and innovation. Units: 6.

Prerequisite: ECON 300

ECONOMICS

ECON 410
Advanced Game Theory and Applications
This course develops game theory, the science of strategic interaction, *i.e.*, interdependent individuals seeking to promote their self interest, with applications in economics, biology, and philosophy. The mathematical nature of game theoretic models will be reflected in a focus on problem solving. Units: 6.

Prerequisite: ECON 300 and either ECON 225 or consent of instructor

ECON 420
Money and Monetary Policy
An examination of the role of money in market economies and its influence on the performance of such economies. This course emphasizes the role of central banks, financial institutions, and global capital flows. Units: 6.

Prerequisite: ECON 320

ECON 425
Entrepreneurship and Finance
This course applies microeconomic thinking to the development of entrepreneurial enterprises. Students will work in teams to develop plans for a new enterprise. The course relies heavily on the expertise of invited speakers (including alumni) and the analysis of case studies. Each invited expert will give a guest lecture, lead discussion of a case study, and mentor students in their projects. Units: 6.

Prerequisite: ECON 300 and either ECON 170 or ECON 220

ECON 430
Capital and Growth
An examination of the determinants of long-term economic growth and productivity. Particular attention given to the role of capital, international competitiveness, savings, tangible investment, and the role of public policy in all such areas. Units: 6.

Prerequisite: ECON 300 and 320

ECON 440
Public Expenditure
A study of governmental expenditures in the American economy and of ways to evaluate their effects on economic efficiency and on the distribution of income. Units: 6.

Prerequisite: ECON 300

ECONOMICS

ECON 450
Economics of the Firm
Even in a “market” economy, the preponderance of economic activity is carried out through firms and other organizations. The course examines economic theories of the firm, and explores some of the canonical questions, such as why are their firms, how the separation of ownership and control of a firm shapes decision making, what determines the boundary between organizations and markets (*e.g.*, make-or-buy decisions), what types of firms are most innovative, and how new technologies affect organizational structure. The central concepts are fleshed out by examining business firms, as well as not-for-profit enterprises, political parties, and government agencies. Units: 6.

Prerequisite: ECON 300

ECON 460
International Economics
An inquiry into the historical and theoretical foundations of international trade, leading to a critical analysis of contemporary problems and policies. Units: 6.

Prerequisite: ECON 300

ECON 465
International Finance
The course focuses on macroeconomic issues and policies in open economies such as the United States. The course will provide a general body of knowledge on topics such as exchange rate policy regimes; international financial organizations; the interaction between macroeconomic policies and exchange rate regimes; and financial crises. It presents economic models and analytical tools that can be applied to understand the changing world economy and analyze problems in international economic policy. Units: 6.

Prerequisite: ECON 320

ECON 470
Labor Economics
A survey of labor economics that covers wage determination, minimum wages, employment and welfare policies, education and on-the-job training, earnings inequality, and worker migration and turnover. A research paper is a central part of the course. Units: 6.

Prerequisite: ECON 300 and ECON 380

ECON 490
Law and Economics
Along with an introduction to legal analysis, a study of the political economy of four core areas of the law: property, contracts, torts, and crime and punishment. Applies rational-choice theories to both economic and political decisions involving the law. Introduces game theory, the mathematics of interdependent choices. Units: 6.

Prerequisite: ECON 300 or consent of instructor

ECONOMICS

ECON 495
Advanced Topics in Economics
Topics will vary with instructor and year; thus, if the substance of the course changes, students may take *Advanced Topics* more than once. Each offering will employ analytical techniques developed in the intermediate-level courses (Economics 300, 320, and 380.) Substantive topics might include, but would not be limited to, economics of the arts, economics of sports, computational finance, international finance, public sector economics, economics of the environment, and studies of specific industries. Units: 6.

Prerequisite: ECON 300, 320, and 380

ECON 500
Advanced Microeconomics
Advanced topics in microeconomics that prepare students for a first graduate course in microeconomics. Units: 6.

Prerequisite: ECON 300; MATH 300 or 310 recommended

ECON 520
Advanced Macroeconomics
Advanced topics in macroeconomics that prepare students for a first graduate course in macroeconomics. Units: 6.

Prerequisite: ECON 300, 320, and 380

ECON 550
Social Choice Theory
Social choice theory is about collective choice: how the different preferences of a group of people could or should be reconciled to produce a collective decision. Examples of such collective choices abound in economics, politics and everyday life. Topics include understanding and evaluating various voting methods and Arrow's Impossibility Theorem. Units: 6.

Prerequisite: ECON 300; MATH 300 recommended

ECON 390, 590, 690
Tutorial Studies in Economics
Advanced readings, discussions, and essays in economic problems of special interest to the student. Units: Variable.

Prerequisite: Counter Registration Required.

ECON 191, 391, 591, 691
Directed Study in Economics
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

ECONOMICS

ECON 195, 395, 595, 695
Internship in Economics
Applied work with a private firm or public-sector agency in economics, arranged under the direction of an instructor in the department. In each case, the academic credit is based on related readings, reports, and presentations. Units: Variable.

Prerequisite: ECON 300, 320, or 380 Counter Registration Required.

ECON 399, 599, 699
Independent Study in Economics
Advanced research on a topic of the student's choice, organized in consultation with an instructor. Students considering an honors project should register for this course. Units: Variable.

Prerequisite: Counter Registration Required.

EDUCATION

Associate professors: Purkey (Bee Connell Mielke Professorship in Education, chair), Williams
Visiting professor: Beck

While Lawrence does not offer a college major in education, the education department does prepare students to become licensed teachers in public and private schools. In addition, the department introduces students to the study of education as an academic discipline within the liberal arts. Courses in education studies (EDST) are open to all students and may be counted toward fulfilling the General Education Requirement (GER) in social sciences. The department also offers tutorial and independent-study opportunities for students interested in education policy, history of education, educational anthropology and psychology, and the practical application of education methodology.

Teacher certification for undergraduates
Students who seek certification to teach middle or senior high school (early adolescence through adolescence) may choose from nearly all majors, including the social sciences, history, the natural sciences, mathematics, mathematics-computer science, computer science, theatre arts, English, English as a second language, and environmental studies. (Students planning to teach instrumental or vocal music must be admitted to the Conservatory. Please see the Conservatory of Music for more information.)

Students who want to teach art or foreign language (Chinese, French, German, Japanese, Latin, Russian and Spanish) and music (choral, general or instrumental) receive special-field certification for teaching early childhood through adolescence (K-12).

For certification in social studies and the natural sciences, students elect a single discipline as their major — for example, history or chemistry — and may also pursue an interdisciplinary "broad fields" course of study.

A few academic subjects (e.g., English) permit a "minor" for certification purposes, thereby affording the student both major and minor teaching opportunities in the schools.
In all subject areas, certification requires completing a Lawrence major or its equivalent with a minimum GPA of 2.75 in the major and cumulative. Please see "Major Subject Area Requirements," for specific disciplinary requirements.

Students who wish to qualify for a teaching license should plan their schedule with the chair of the education department as early as possible in their Lawrence career. Students who enter Lawrence knowing that they want to become certified to teach can do so within the four-year undergraduate program. Before student teaching, which must occur in the senior year or in a 13th term, students must be admitted to the teacher education program. Graduation must precede certification for licensure.

Generally, all education courses except EDST 175 and EDST 180 require sophomore standing. Education 560 or 563, methods of teaching, must be taken during the Term III that immediately precedes student teaching.

Student teaching assignments for 18-week public or private school semesters are contracted with local Fox Valley schools or in Chicago via the TeachChicago! program. A 13th term of student teaching, tuition-reduced ($1,000), is available for Lawrence undergraduates who have completed all graduation requirements except the student teaching cluster of courses and wish to be certified. Ask the department chair for details and for information on additional requirements. This term must take place within one year of graduation.

In some majors, students planning to student teach during the senior year may substitute student teaching for, or incorporate it into, their department's *Senior Experience*. Interested students should consult with their major advisor as early as possible in the junior year.

Certification for graduates
Students who have graduated from college can be certified for licensure through Lawrence. Typically, the certification program for graduates takes 1 1/2 years, which includes the required 18 weeks of student teaching. (Program length may vary depending on undergraduate major and coursework.) Graduates should consult the department chair for further information about the certification program.

Graduates seeking certification must pass the Praxis I and Praxis II before they apply to be admitted to the teacher education program. Other requirements for admittance (e.g., 2.75 GPA) and certification are listed in the Teacher Certification at Lawrence University handbook.

Tuition for Lawrence graduates participating in this program is set at 50 percent of the current year's tuition rate, and the student teaching fee is adjusted by 50 percent.

For non-Lawrence graduates, tuition for courses required for certification outside the degree-seeking student program is set at 75 percent of the current year's tuition rate. A separate fee is charged for the student-teaching portion of the program, for which the student earns 18 units of credit.

General requirements, all students and subject areas
In addition to the required education courses, all students seeking certification must complete a major (or its equivalent) in the subject they plan to teach. To receive a minor endorsement, students must complete a department-approved minor or seven courses in the discipline. Students seeking licensure must also complete the Lawrence University General Education Requirements, including a course in a non-Western history or culture, a course in a physical science, a course in a biological or life science, and a mathematics course.

For Wisconsin licensure, social science majors need to take Cooperatives, which is an adjunct to Education 560. Natural science and social studies candidates are required to take an environmental studies course.

Students who want to become licensed must be admitted to Lawrence's teacher education program. Please see the department chair or the department's administrative assistant for the application form and list of requirements. Students seeking licensure should also consult the Teacher Certification at Lawrence University handbook for further information and requirements.

To be admitted to the teacher education program, candidates for certification must pass Praxis I: Pre-Professional Skills Test (PPST) in reading, writing and mathematics. Before they may student teach, candidates for certification must pass Praxis II: Subject Assessment Specialty Area Test for each subject in which they intend to be licensed. Students should also be aware that certification requirements are subject to revision. It is the student's responsibility to confirm requirements with the chair of the education department.

EDUCATION

Required education courses for certification in all academic areas at the middle, junior, and senior high school levels and for elementary art, music and foreign language certification

(Please see "Major subject area requirements" and "The major in music education" for additional course requirements)

	(a)	(b)
Education Studies 180		
Psychology of Learning	6	4
Education Studies 340		
Sociology of Education	6	4
Education Studies 350		
Ethnicity, Cultural Diversity, and Education	6	4
Education 430		
Educating All Learners	6	3
Education 431		
Educating All Learners (Music Education only)	3	3

The appropriate teaching methods course for your certification area:

Education 560		
Methods in Middle and Secondary Teaching	6	4
Education 563		
Elementary and Secondary Foreign Language Methods †	6	4
Education 565		
Methods, Materials and Assessment in Teaching English to Speakers of Other Languages ††	6	4
Education 585 (Art 585)		
Art in the Elementary and Secondary Schools †††	6	4
Education 650		
Student Teaching	18	12
Education 660		
Advanced Methods in Teaching	3	3

(a) Lawrence course credit, in units
(b) Certification semester hours
† Required for foreign language certification only
†† Required for ESL certification only
††† Required for art certification only

Major subject area requirements

Art - A major consists of the 11 courses required for a studio art major, plus ART 585. See Certification for Teaching K-12, page 158 for further information regarding studio requirements and recommendations for art education certification. ART 585 should be taken in the Term III immediately prior to student teaching (EDUC 650).

English - A major consists of a minimum of 10 courses. In addition to demonstrating a familiarity with contemporary literature of world scope, students must submit evidence of coursework in composition, linguistics or history of the English language, literature for adolescents and literature of minority groups in America. Adolescent literature may be fulfilled by taking three units of tutorial study in education (Education 390 or 590) devoted to literature for adolescents. A minor is available.

EDUCATION

English as a second language (ESL/ELL) - A major endorsement is available in ESL/ELL and requires completion of the following: the education certification sequence (e.g., EDST 180, EDST 340, EDUC 650, etc.); the four course ESL/ELL sequence of Linguistics 150, Linguistics 360, Linguistics 530 and EDUC 565; and an academic major in any one of the liberal arts and sciences. Students may also add ESL/ELL certification to certification in another area (e.g., English, Music Education, biology, history, etc.).

Foreign languages - A major in Chinese, Classics, French, German, Japanese, Russian or Spanish consists of 10 courses. Seven courses make up the minor option, except in Russian, in which there is no minor. It is required that students spend a term in a country studying its native language. To be certified, students must pass an oral proficiency test.

Mathematics-computer science; computer science - A major consists of 10 courses.

Mathematics - A major consists of 10 courses; a minor is available.

Music – Click here for requirements.

Natural sciences - Students are licensed in physical science (chemistry and/or physics), earth and space science (geology), or life and environmental science (biology and/or environmental science). Students must complete a Lawrence major in one science (e.g., biology) and take at least one course from each of the other sciences. A course in astronomy or space science or a course that includes either as a topic is also required. Please see the department chair for further information.

Biology - A major consists of 10 courses, plus courses in other science subjects; a minor is available.
Chemistry - A major consists of 10 courses, plus courses in other science subjects; a minor is available.
Geology/Earth science - A major consists of 10 courses, including astronomy and oceanography, plus courses in other science subjects; a minor is available.
Physics - A major consists of 10 courses, plus courses in other science subjects; a minor is available.

Environmental science- A major consists of 10 courses, plus courses in the other science subjects; a minor is available. Students must take Education/Environmental Studies 400 and should fulfill the science-track requirements of the environmental studies major. (Students are urged to major in one of the other sciences and minor in environmental studies if they plan to teach at the secondary level.)

Broad fields science - A broad-fields science license is available. To be eligible, students must complete the requirements to be certified in one of the science majors (biology, chemistry, environmental science, geology/earth science and physics), a minimum of two courses in each of two other science disciplines, and at least one course in each of the remaining sciences.

EDUCATION

Social studies - Wisconsin licenses in the social sciences and history are grouped within the broad category of social studies. Students must complete a Lawrence major in any social science or history and take one course in each of the remaining social sciences (including history). An environmental studies course is also required. (Non-history majors are strongly urged to take a minimum of two history courses, one in U.S. history and one in global history.)

Anthropology/Sociology - A major consists of 10 courses; a minor is available. (*Note*: Wisconsin does not offer separate licensure in anthropology.)
Economics - A major consists of 10 courses; a minor is available.
History - A major consists of 10 courses; a minor is available.
Political science - A major consists of 10 courses; a minor is available.
Psychology - A major consists of 10 courses; a minor is available.

Broad fields social studies - A broad-fields social studies license is available. To be eligible, students must complete the requirements to be certified in one of the social sciences or history (anthropology/ sociology, economics, history, political science and psychology), a minimum of two courses each in two of the other social studies, and at least one course in each of the remaining social studies. Instruction in consumer cooperatives and conservation is incorporated into the methodology course Education 560.

Theatre arts - A major consists of 10 courses; a minor is available.

Education Studies Courses

EDST 180
Psychology of Learning
An investigation of how people learn. This course examines learning theories (*e.g.,* behavioral, humanistic, cognitive, constructivist) and their implications for the educational process in schools. Other topics include learning and the brain, the nature of expertise, the design of learning environments, and approaches to instruction that promote meaningful learning. Practicum of 20 hours required. Units: 6. Also listed as Psychology 180

EDST 240
History of Education in the U.S.
This course provides students with an overview of the development of educational institutions and practices within the U.S. over the last 230 years. The course will address key debates and turning points in American education, including contemporary issues such as school choice, accountability and assessment, and multicultural education. Practicum of 20 hours required. Units: 6. Prerequisite: Sophomore standing

EDST 260
Philosophical Foundations of Education
This course provides students with an introduction to seminal texts, central questions, and rival traditions in the philosophy of education. Course readings take students on a journey from ancient Greece, through the Renaissance and Enlightenment, and into our (post)modern era—all of which have influenced the nature (*i.e.*, aims, content, and process) of education as it is experienced today. Throughout the term, students are encouraged to consider how the course works assist them in developing a personal philosophy of education. Units: 6. Prerequisite: Sophomore standing

EDUCATION

EDST 300
International and Comparative Education
This course invites students to develop a global perspective as they deepen their understanding of the field of education. It engages in a comparative study of the theories, policies, and practices embraced by schools in other regions of the world, and it asks students to critically analyze the ways in which culture, politics, economics, and non-governmental organizations influence educational development and reforms. Units: 6. Prerequisite: Sophomore standing or consent of the instructor

EDST 330
School and Society
This course focuses on the relationship between schools and the socio-political environments in which they exist. Students will consider the extent to which schools should be developed to meet the needs and expectations of the societies in which they are housed, as well as the role schools may play in fostering social change. We will study texts by classical political theorists such as Plato, Rousseau, and Kant, as well as works from 20th century scholars such as Dewey, Althusser, and Freire. Practicum of 20 hours required. Units: 6. Prerequisite: Sophomore standing

EDST 340
Sociology of Education
An examination of the social foundations of education in the United States with particular attention paid to the cultural, political, and economic functions of education in modern society. Other topics include the reproductive function of schooling in a society divided along lines of race/ethnicity and class, schools as sites of cultural production, and the historical tension in the U.S. between “equality” and “excellence” in education. Practicum of 20 hours required. Units: 6. Also listed as Ethnic Studies 240 Prerequisite: Sophomore standing

EDST 345
Distributed Cognition
Distributed cognition explores the role of the environment, artifacts, social interaction, and culture in human reasoning, problem-solving, and learning. Domains of study range from the sophisticated (ship navigation) to the everyday (time-telling). Emphasis is placed on studies of cognition in real-world settings. Units: 6. Also listed as Anthropology 345, Psychology 345 Prerequisite: Sophomore standing

EDST 350
Ethnicity, Cultural Diversity, and Education
A study of the experience of children and adolescents from different ethnic, cultural, and economic groups. Emphasis on understanding the social consequences of these differences and how such differences affect educational achievement and attainment. The sources and educational effects of individual, institutional, and systemic racism, sexism, and other forms of prejudice and discrimination will also be examined. Practicum of 20 hours required. Units: 6. Also listed as Ethnic Studies 241 Prerequisite: Sophomore standing

EDUCATION

EDST 400
The Environment, Community, and Education
A study of education, the creation and maintenance of community, and the development of ecological intelligence. Emphasis on how schools respond to their surroundings, the extent to which modern forms of education "fit" students to live in local communities, and the idea of community as a sense of place. Emphasis will also be placed on cultural assumptions about the environment implicit within the curriculum, the effect of schooling on students' understanding of and relationship to the environment, and the role of education in promoting ecological and social sustainability. Units: 6. Also listed as Environmental Studies 460 Prerequisite: Sophomore standing or consent of instructor

EDST 545
Gesture Studies
Gesture studies is an interdisciplinary field that examines the use of the hands and other parts of the body in communication and cognition. In this seminar we discuss studies of gesture types, universals, and variations; gesture development; gesture production and perception; relations of gesture to thought and language (spoken and signed); and functions of gesture in human interaction, problem-solving, and learning. Units: 6. Also listed as Linguistics 545, Psychology 545 Prerequisite: One course in linguistics or psychology, or consent of the instructor

EDST 390, 590, 690
Tutorial in Education Studies
Tutorial studies in the fields of educational policy, environmental education, history of education, comparative education and on various topics related to the social foundations of education. Units: Variable. Prerequisite: Counter Registration Required

EDST 191, 391, 591, 691
Directed Study in Education Studies
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable. Prerequisite: Counter Registration Required.

EDST 399, 599, 699
Independent Study in Education Studies
Units: Variable. Prerequisite: Counter Registration Required

Education Courses

EDUC 210
Applied Psychology: Peer Education
Applied work in community psychology, carried out in conjunction with Counseling Services, in preparation toward becoming a Peer Educator. Focus is on learning strategies for assessing and developing community, group process, and communication. Students investigate topics such as interpersonal decision-making, sexual assault, and substance abuse. Through assigned readings, class discussions, presentations, and guest speakers, students will develop interpersonal facilitation skills, learn aspects of community and campus culture, and collaborate in the planning of educational programs. Units: 3. Also listed as Psychology 210

EDUCATION

EDUC 295
ArtsBridge Seminar
A seminar on curriculum design applied through interaction with arts education in a K-12 classroom. Students will research curricular areas and content standards, design interdisciplinary lessons linking the arts to the core curriculum, and introduce their project to an assigned K-12 class. Practicum of 25 hours required. Units: 3. Prerequisite: Consent of instructor

EDUC 430
Educating All Learners
This course focuses on two related topics: promoting effective reading and writing in school content areas and adapting instruction to learners with special needs. As part of the latter focus, students will explore various exceptionalities, legal requirements, school arrangements, and teacher practices. Practicum of 20 hours required. Units: 6. Prerequisite: EDST 180 and junior standing

EDUC 431
Educating All Learners - Music
This course focuses on adapting instruction to learners with special needs. Students will explore various exceptionalities, legal requirements, school arrangements, and teacher practices. Practicum of 10 hours required. For music education students. Units: 3. Prerequisite: EDST 180, junior standing, and declared major in music education

EDUC 560
Methods in Middle and Secondary Teaching
A seminar on methods and organization of teaching particular subjects in the middle and secondary school, including English, social studies, mathematics, science, and theatre. Practicum of 20 hours required. Units: 6. Prerequisite: Junior standing and admission to certification program

EDUC 563
Elementary and Secondary Foreign Language Methods
A seminar on teaching foreign languages in the elementary, middle, and secondary school. Emphasis on curriculum planning, methods of instruction, and assessment of learning. Issues related to classroom management and organization will be addressed. Practicum of 20 hours required. Units: 6. Prerequisite: Junior standing and admission to certification program

EDUC 565
Methods, Materials, and Assessment in Teaching English to Speakers of Other Languages
A seminar in teaching English to speakers of other languages in elementary, middle, and secondary school as well as in foreign language classrooms abroad. The course focuses on curriculum planning, methods of instruction, and assessment of learning for English language learners in diverse learning environments. Practicum of 20 hours required. Units: 6. Prerequisite: Junior standing and consent of instructor

EDUCATION

EDUC 585
Art in the Elementary and Secondary Schools
Art class observations, studio practice in both two- and three-dimensional disciplines, studio demonstrations/lectures, and selected readings and discussions relative to the visual expression of the elementary, junior, and senior high school student. Units: 6. Also listed as Studio Art 585 Prerequisite: Four studio art courses, EDUC 180 and 340 and two art history courses.

EDUC 650
Student Teaching (Middle and Secondary Schools)
Student teaching is normally taken during Term I, coinciding with the public school fall semester. A weekly seminar at Lawrence is required as part of this course. See department chair for prerequisites and for exceptions to the Term I requirement. Units: 18. Prerequisite: Senior standing and admission to certification program; contact department chair about prerequisites and corequisites

EDUC 660
Advanced Methods in Teaching
The seminar will engage students in critical reflection upon their student teaching experience. Concrete and theoretical problems having to do with teaching and learning will be explored (*e.g.,* classroom management, assessment of pupil performance, curriculum design, instructional methods), as will issues having to do with educational policy and school organization. Units: 3. Prerequisite: Concurrent enrollment in EDUC 650 or consent of instructor

EDUC 390, 590, 690
Tutorial Studies in Education
Tutorial studies in the fields of educational psychology, learning theory, cognitive science, alternative education and on various topics related to teaching and learning. Units: Variable. Prerequisite: Counter Registration Required.

EDUC 191, 391, 591, 691
Directed Study in Education
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable. Prerequisite: Counter Registration Required.

EDUC 399, 599, 699
Independent Study in Education
Advanced study arranged in consultation with the department. Students considering a senior honors project should register for this course. Units: Variable. Prerequisite: Counter Registration Required.

Recent tutorial topics in education
Educational Psychology: Motivation and Achievement
History of Education in the U.S.
Education and the Environment
Comparative Education: Japan and the U.S. Educational Policy
Sociology of Sport: Athletics and Secondary Education

ENGLISH

Professor: Dintenfass
Associate professors: Barrett* (chair terms I and II), Hoffmann (chair term III), Spurgin (Bonnie Glidden Buchanan Professorship in English Literature)
Assistant professors: Bond, Khor, McGlynn
Visiting assistant professor: Rasmussen

* On leave Term III

The English department offers courses in British, American, and postcolonial literature from a wide range of historical eras, as well as courses in creative writing and literary theory. Also available to advanced students are tutorials and independent study with faculty members whose interests cover a wide range of topics.

2010-2011 Course Catalog

Required for the English major

1). English 150 or its equivalent

After English 150, students majoring in English are required to complete eight six-unit courses, distributed as follows:

2) Two courses from the intermediate group: English 230, 240, 250
3) One course in Shakespeare, normally English 425
4) Two courses focusing on periods before 1800:
English 400, 420, 430, 435, 440, 445, 450, 470
5) One course focusing on the nineteenth century:
English 455, 460, 465, 472, 473, 474, 476
6) One course focusing on the twentieth or twenty-first centuries:
English 480, 483, 485, 490, 495, 498, 500, 503, 510, 515, 516, 518, 521
7) One additional course in English

8) Finally majors are also required to complete the English Department's *Senior Experience* (see further explanation below).

Required for the English minor
Students minoring in English are required to maintain a C average in the minor. They are also required to complete six six-unit courses in English, distributed as follows:

1. Two courses from the following introductory and intermediate group: English 150, 230, 240, 250
2. One course focusing on periods before 1800: English 400, 420, 425, 430, 435, 440, 445, 450, 470
3. One course focusing on the nineteenth century: English 455, 460, 465, 472, 473, 474, 476
4. One course focusing on the twentieth or twenty-first centuries: English 480, 483, 485, 490, 495, 498, 500, 503, 510, 515, 516, 518, 521
5. One additional course in English

ENGLISH

Graduate School
Students considering graduate work in English are advised that, for the master's degree, most graduate schools require demonstrated proficiency in at least one modern foreign language. For the doctorate, the usual requirement is demonstrated proficiency in two modern foreign languages, and, in some cases, also an ancient language. English 525: Contemporary Critical Theory is also an asset when preparing for graduate school. College work leading toward graduate study should be planned with these considerations in mind.

Certification for Secondary teaching in English
Students preparing to teach English in secondary schools should bear in mind that they must have from 30 to 40 semester hours of preparation in English for certification. Freshman Studies and Literary Analysis (English 150) count toward certification. Requirements for the major satisfy requirements for certification in Wisconsin, except that the student seeking certification must satisfactorily complete at least one course in advanced composition (e.g., English 350, 360, or 370); at least one course in linguistics or the English language (e.g., Linguistics 105 or 150); a tutorial in literature for adolescents; and either English 260, 500, or 510 or a tutorial in the literatures of minority groups in America. Please refer to the Department of Education listing for more detailed information on preparation for teacher certification.

Departmental advisors
When students officially declare themselves English majors, they should choose a departmental advisor who will be responsible for guiding them in planning and completing their major course of study. Questions about the advising of English majors should be addressed to the department chair.

Advanced Placement
All students who have earned a 4 or better in the Advanced Placement English Language and Composition Exam will be given credit for one course in English; for majors, this credit will fulfill the requirement of "one additional course in English." All students who have earned a 4 or better in the Advanced Placement English Literature and Composition Exam will be given credit for one course in English and will receive advanced placement in courses at the intermediate level (English 230, 240, 250); for majors, this credit will fulfill the requirement of English 150. Questions about exemption and placement should be addressed to the department chair. The application of AP credit towards the general education requirements for either the B.A. or the B.Mus. degrees will be determined by university policy. Please click here for more information about university credit for AP Examinations.

ENGLISH

***Senior Experience* in English**
The English department's *Senior Experience* may be fulfilled through one of several options:

1) An honors project in English (or adequate progress toward completing an honors project as approved by departmental petition)
2) Eng 600: *Senior Seminar in English*: a seminar involving analysis of theoretical, historical, critical, and literary readings at an advanced level in conjunction with students' research and writing of an original, substantial paper (taken during the senior year or, in some cases, during spring term of the junior year)
3) An advanced course in creative writing with additional work determined by the instructor (taken during the junior or senior year). Students choosing this option should plan ahead in order to complete the relevant prerequisite for the advanced course in creative writing.
4) Student teaching in English, along with a paper co-directed by the student's academic advisor in English and a faculty member in the education department.

Students pursuing double majors or double degrees are encouraged to consult with faculty from the English department and the other major department prior to taking English 600 if they wish to undertake a research topic that draws upon both of their majors. Students pursuing double majors or double degrees also have the option of doing an honors project that is interdisciplinary in nature, as long as one of the directors of the project is a professor in the English department.

Courses

ENG 150
Literary Analysis
An introduction to the techniques of literary analysis through the detailed study of individual texts. Units: 6.

ENG 170
Shakespeare in London
Students will study several plays by William Shakespeare selected from among the current offerings by the Royal Shakespeare and other companies. Discussions will address the plays themselves, production techniques, and the audiences to whom they appeal. Students are required to attend performances of the plays under study. *Offered at the London Centre.* Units: 6.

Also listed as Theatre Arts 170

Prerequisite: Must be attending Lawrence London Centre

ENGLISH

ENG 210
Romanticism Then and Now
An interdisciplinary investigation of the powerful and enduring influence of Romanticism in the arts. The course will connect formative examples of poetry (Wordsworth, Keats), music (Beethoven, Schubert), and visual arts (Blake, Turner) to each other and to their late romantic and neo-romantic progeny, in conjunction with select live performances and field trips to historic sites and museums. This course is general in scope and no prior musical knowledge is expected. Units: 6.

Prerequisite: Must be attending the Lawrence London Centre

ENG 230
Major British Writers I
Intensive study of five or six major British authors from Chaucer to Swift. Emphasis on close reading and critical writing. Units: 6.

Prerequisite: ENG 150 or its equivalent or sophomore standing

ENG 240
Major British Writers II
Intensive study of five or six major British authors from Wordsworth to Yeats. Emphasis on close reading and critical writing. Units: 6.

Prerequisite: ENG 150 or its equivalent or sophomore standing

ENG 250
Major American Writers
Intensive study of major American authors from Emerson to Hughes. Emphasis on close reading and critical writing. Units: 6.

Prerequisite: ENG 150 or its equivalent or sophomore standing

ENG 260
Survey of African American Literature
A survey of African American literature from slave narratives through contemporary literature. Readings include works by Harriet Jacobs, Frederick Douglass, Langston Hughes, Zora Neale Hurston, Richard Wright, Amiri Baraka, Audre Lorde, and Toni Morrison. Units: 6.

Also listed as Ethnic Studies 360

Prerequisite: ENG 150 or its equivalent or sophomore standing

ENGLISH

ENG 270
Women's Literary History
An examination of how and why linear narratives of literary history have traditionally omitted or obscured women's contributions. Topics will include the stereotypical links drawn between print and sexual promiscuity, as well as other factors that have impacted the roles that women have played in literary history. Units: 6.

Also listed as Gender Studies 250

Prerequisite: ENG 150 or GEST 100

ENG 280
Survey of Postcolonial Literature
An introduction to major postcolonial works in their literary, historical, and cultural contexts. Readings include novels by African, Asian, and Caribbean authors such as Chinua Achebe, Salman Rushdie, and Jean Rhys. Units: 6.

Also listed as Ethnic Studies 280

Prerequisite: Sophomore standing, ENG 150, or consent of instructor

ENG 350
Creative Writing: Non-Fiction
Practice in the writing of non-fictional prose. Units: 6.

Prerequisite: Sophomore standing or consent of instructor

ENG 360
Creative Writing: Fiction
Practice in the writing of short fiction. Units: 6.

Prerequisite: Sophomore standing or consent of instructor

ENG 370
Creative Writing: Poetry
Practice in the writing of poetry. Units: 6.

ENG 400
Satire
A study of the theory and practice of satiric writing. Readings in Ben Jonson, Pope, Swift, Gay, Byron, Waugh, West, Orwell, Heller, and others. Units: 6.

Prerequisite: Junior standing or consent of instructor

ENGLISH

ENG 420
Studies in Medieval Literature
A study of Middle English literature and culture, focusing especially on the oral and performative dimensions of literature produced between 1300 and 1550. Units: 6.

Prerequisite: Junior standing, ENG 230, or consent of instructor

ENG 425
Shakespeare
An introduction to Shakespeare's plays and their literary, historical, and theatrical context. Units: 6.

Also listed as Theatre Arts 432

Prerequisite: Junior standing, ENG 230, or consent of instructor

ENG 430
Renaissance Literature
A selected study of poetry and prose in Sixteenth Century England. Readings will include Spenser's *Faerie, Queene,* and lyric poetry from Wyatt to Sidney. Units: 6.

Prerequisite: Junior standing, ENG 230, or consent of instructor

ENG 435
Renaissance Drama
A study of eight to ten plays from the early modern period, excluding Shakespeare. Readings include Marlowe, Jonson, Middleton and Webster. Units: 6.

Also listed as Theatre Arts 436

Prerequisite: Junior standing, ENG 230, or consent of instructor

ENG 440
Milton and the 17th Century
A study of Donne and the metaphysical poets, the poetry and prose of Milton, and the poetry of Dryden. Emphasis on Milton. Units: 6.

Prerequisite: Junior standing, ENG 230, or consent of instructor

ENG 445
Restoration and 18th-Century Comedy
A study of English comedies as reflections of changing taste and thought in the period 1660-1800. Authors include Wycherley, Etherege, Congreve, Farquhar, Steele, Fielding, Goldsmith, and Sheridan. Units: 6.

Also listed as Theatre Arts 434 Prerequisite: Junior standing, ENG 230, or consent of instructor

ENG 450
18th-Century Literature
A study of major works in satire, poetry, and fiction as reflections of 18th-century thought and taste. Readings in Swift, Defoe, Pope, Fielding, Samuel Johnson, and others. Units: 6.

Prerequisite: Junior standing, ENG 230, or consent of instructor

ENG 455
Romanticism
A study of the period from 1790 to 1830, focusing on the development and elaboration of what we now call Romanticism. Readings in the major authors of the period: Blake, Wordsworth, Coleridge, Byron, Keats, Percy Shelley, and Mary Shelley. Units: 6.

Prerequisite: Junior standing, ENG 240, or consent of instructor

ENG 460
The Victorian Age
A study of the period from 1830 to 1900, focusing on poetry, fiction, and critical prose. Readings range widely, including selections from Carlyle, Tennyson, the Brownings, the Rossettis, and Oscar Wilde. Units: 6.

Prerequisite: Junior standing, ENG 240, or consent of instructor

ENG 465
The English Novel
A study of English fiction from 1740 to 1900. Readings include novels by Richardson, Burney, Austen, Dickens, Eliot, and Hardy. Units: 6.

Prerequisite: Junior standing, ENG 240, or consent of instructor

ENG 470
Early American Writing
A study of the ways early writers of America attempted to adapt “Old World” forms and styles to the “New World” — as they sought initially to compose and sustain themselves and gradually to constitute the United States of America. Narratives of exploration and travel, contact with Native Americans, Puritan poetry, and Revolutionary—era political writing are some of the topics the course will address. Selected readings from the 17th and 18th centuries into the early decades of the 19th. Units: 6.

Prerequisite: Junior standing, ENG 230, or consent of instructor

ENG 472
American Culture and the Civil War
A study of American culture of the Civil War era, including readings from the abolition movement as well as the texts, photography, and painting produced in response to the war. Selected readings from Douglass, Jacobs, Grant, Stowe, and Chesnutt, as well as poets such as Whitman, Melville, Dickinson, and Harper. Units: 6.

Prerequisite: Junior standing, an intermediate course in English, or consent of instructor

ENGLISH

ENG 473
The American Renaissance and the Literature of Reform
This course will consider the relationship between American transcendentalism and the literature of reform, focusing on women's rights and abolition in particular. Readings from Emerson, Thoreau, Dickinson, Child, Jacobs, Douglass, Stowe, Harper and others. Units: 6.

Prerequisite: Junior standing, an intermediate course in English, or consent of the instructor.

ENG 474
American Poets of the Nineteenth Century
This course will read across the spectrum of nineteenth-century American poetry, considering how and why writers turn to this versatile genre as their preferred mode of expression. Readings from Dickinson, Piatt, Melville, Whitman, Harper, Horton, Larcom, and others. Units: 6.

Prerequisite: Junior standing, an intermediate course in English, or consent of the instructor.

ENG 476
Nineteenth-Century American Women Writers and the Literary Marketplace
Focusing primarily on the nineteenth century, this course will consider how American women writers position themselves in relation to the literary marketplace. Readings by writers such as Sedgwick, Child, Fern, Stowe, Howe, Dickinson, Harper Piatt and others. Units: 6.

Also listed as Gender Studies 476

Prerequisite: Junior standing, an intermediate course in English, or consent of instructor.

ENG 480
Modernist British Fiction
A study of selected works of British fiction in relation to early 20th-century thought. Authors include Conrad, Lawrence, Joyce, Mansfield, Forster, Woolf, and others. Units: 6.

Prerequisite: Junior standing, ENG 240, or consent of instructor

ENG 483
American Autobiography
A study of prominent American autobiographies from the 19th and 20th centuries. The course will examine how autobiography responds to social, cultural, and aesthetic conditions and the relationship of the genre to the larger American literary tradition. Units: 6.

Prerequisite: Junior standing, ENG 250, or consent of instructor

ENG 485
Modernist Poetry
An exploration of modernist poetry, including work by Yeats, Eliot, Stein, Pound, H.D., Williams, Loy, and others. Units: 6.

Prerequisite: Junior standing, an intermediate course in English, or consent of instructor

ENG 490
Modern Drama
Studies in some of the major playwrights in Europe, England, and America from the time of Ibsen to the present. Units: 6.

Also listed as Theatre Arts 440

Prerequisite: Junior standing, an intermediate course in English, or consent of instructor

ENG 495
Modernist American Fiction
A study of American fiction from the first half of the 20th century. Authors include Wharton, Cather, Hemingway, Faulkner, Ellison, and others. Units: 6.

Prerequisite: Junior standing, ENG 250, or consent of instructor

ENG 498
Representing War in American Writing
This course will analyze the representation of war across the spectrum of American writing, examining the ways that national identity is posited in relation to military experience. Readings from a range of periods but focusing in particular on the Civil War, World Wars I and II, and the Vietnam War. Units: 6.

Prerequisite: Junior standing, an intermediate course in English, or consent of instructor

ENG 500
Contemporary American Fiction
Examination of selected works of American fiction, with particular emphasis on the literary movements of the post-World War II era, including postmodernism, multiculturalism, regionalism, and other topics. The course will include a diverse array of readings, which will vary by term and topic, as well as selected films and theoretical texts. Units: 6.

Prerequisite: Junior standing, ENG 250, or consent of instructor

ENG 503
Contemporary American Poetry
Examination of selected works of American poetry with particular emphasis on the post-World War II era. The course will consider individual poets' responses both to poetic traditions and to formal and thematic innovations of the 20th century. Units: 6.

Prerequisite: Junior standing, ENG 250, or consent of instructor

ENGLISH

ENG 510
Literature of the Harlem Renaissance
A study of poetry, fiction, and essays by African American writers from the era of World War I through the 1930s. Authors include Langston Hughes, Zora Neale Hurston, Claude McKay, Nella Larsen, W.E.B. Du Bois, and others. Units: 6.

Also listed as Ethnic Studies 561

Prerequisite: Junior standing, ENG 250 or 260, or consent of instructor

ENG 515
Gender and Modernist British/American Literature
A study of the construction of gender in early 20th-century fiction and poetry. Authors include Cather, Woolf, Lawrence, Hemingway, Sassoon, and others. Units: 6.

Also listed as Gender Studies 445

Prerequisite: Junior standing, an intermediate course in English or gender studies, or consent of instructor

ENG 516
Literature and Human Rights
An interdisciplinary investigation of the aesthetics and ethics of representing human rights and their violations in literature and film. Texts include novels, plays, essays, and films on topics such as genocide, torture, and development. Units: 6.

Also listed as Ethnic Studies 516

Prerequisite: Junior standing, ENG 280, or consent of instructor

ENG 518
Fictions of Globalization
Is globalization really shrinking the global divide between rich and poor, or is this mere fiction? To explore this question, we will examine contemporary novels and films that showcase individuals in India and China as they grapple with issues such as economic migration, class struggle, and terrorism. Units: 6.

Also listed as Ethnic Studies 518

Prerequisite: ENG 280, junior standing, or consent of instructor

ENG 521
Narratives of International News
A study of the literature that re-presents world events in different ways from the mainstream news media. Texts include novels, memoirs, graphic novels, or documentary dramas. Units: 6.

Also listed as Ethnic Studies 521

Prerequisite: ENG 280, junior standing, or consent of instructor

ENGLISH

ENG 525
Contemporary Critical Theory
A survey of important movements. Among the readings are selections by Derrida, Foucault, and Bakhtin as well as selections from more recent figures, such as Judith Butler, Eve Sedgwick, Henry Louis Gates Jr., Cornel West, and bell hooks. Units: 6.

Prerequisite: Junior standing or consent of instructor

ENG 526
Feminist Literary Theory
This course will examine the historical origins, practical work, and contemporary methodologies of feminist literary theory. We will address why we need feminist literary theory; how it has met (or not) the complexities raised by recent issues in gender, sexuality, and women's studies; and whether or not feminist literary theory can accommodate the nonlinearity, inclusiveness, and flexibility that it demands. Units: 6.

Also listed as Gender Studies 526

Prerequisite: Junior standing, two or more courses in gender studies, or consent of instructor.

ENG 527
History of the Book
To provide an introduction to the interdisciplinary field of Book History, which should help students think more critically about the impact of material culture on intellectual activity. The course will be taught as a speaking intensive seminar, which means that students will frequently be responsible for presenting reading material and leading discussion in the first half of class. Units: 6.

Also listed as History 385

Prerequisite: Junior standing or consent of the instructor.

ENG 530
The English Language
A study of the sounds, structure, usage, and history the English language. Units: 6.

Also listed as Linguistics 530

Prerequisite: LING 150 and sophomore standing, or consent of instructor

ENG 550
Advanced Creative Writing: Nonfiction
A writing workshop for students with previous creative writing experience. Units: 6.

Prerequisite: ENG 350 or ENG 360

ENGLISH

ENG 560
Advanced Creative Writing: Fiction
A workshop for students with previous fiction writing experience. Units: 6.

Prerequisite: ENG 360 or consent of instructor

ENG 562
Advanced Creative Writing: Novel Writing
Course for students composing creative, book-length works of prose. Units: 6.

Prerequisite: ENG 350 or ENG 360, and ENG 550 or ENG 560

ENG 565
Advanced Creative Writing: Poetry
A workshop for students with previous poetry writing experience. Units: 6.

Prerequisite: ENG 370 or consent of instructor

ENG 600
Senior Seminar in English
A seminar involving analysis of theoretical, historical, critical, and literary readings at an advanced level in conjunction with students' research and writing of an original, substantial paper. Each section of the seminar will focus on a theme that can accommodate variety in students' individual research projects.

Theme for Spring 2011: Creativity

Units: 6.
Prerequisite: Majors only; junior standing for spring term, otherwise, senior standing; at least two English courses numbered 400 or above

ENG 390, 590, 690
Tutorial Studies in English
Tutorial study in the literature of various periods, English and American, and in literary forms and composition. Intended primarily for juniors and seniors. Arrangements should be discussed with the department chair. Units: Variable.

Prerequisite: Counter Registration Required.

ENG 191, 391, 591, 691
Directed Study in English
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

ENGLISH

ENG 399, 599, 699
Independent Study in English
Advanced study, arranged in consultation with the department chair. Students considering an honors project should register for this course. Units: Variable.

Prerequisite: Counter Registration Required.

ENVIRONMENTAL STUDIES

Professors: Bjørnerud (Geology, Schober Professorship in Environmental Studies), De Stasio (Biology), Dreher (Philosophy, Lee Claflin-Robert S. Ingraham Professorship in Philosophy), Stoneking (Physics)
Associate professors: Clark (Geology, chair), Gerard (Economics), Hixon* (Government, Gordan R. Clapp Chair in American Studies), Jenike (Anthropology), Knudsen* (Geology), Purkey (Education, Bee Connell Mielke Professorship in Education), Rico (History), Sedlock (Biology), Skran (Government, Edwin & Ruth West Professorship in Economics and Social Science)
Assistant professors: Brozek (Government, Stephen Edward Scarff Professor of International Affairs), Navea (Chemistry)

* On leave Term(s) III

The field of environmental studies addresses some of the most critical and complicated issues of our time: those regarding environmental change and the future of humanity. The systems that make up planet Earth are simultaneously comprehensible and complex, predictable and chaotic, robust and fragile. Changes in one part of this system of systems may have far-reaching implications for other parts. As citizens of Earth, we cannot afford to remain ignorant of the global environmental consequences of our daily activities.

A degree in environmental studies prepares students for a wide spectrum of careers, including environmental law, consulting, policy making, technical innovation, wildlife management, teaching, natural resource managment, and research. Students in the major select one of two tracks: environmental science or environmental policy. The tracks share a common core sequence.

Environmental science integrates the principles and methods of the natural sciences (biology, chemistry, geology, and physics) in order to understand Earth systems and the impact of human activities on them. To be a responsible environmental scientist, one must have some awareness of environmental policy issues.

Environmental policy focuses on how human economic, social, and governmental systems influence human interactions with the environment. Programs in environmental policy prepare students to work in a variety of public- and private-sector settings, including the Environmental Protection Agency, Department of Energy, regional planning commissions, community-development programs, legal firms, private consulting and planning firms, etc. To be a responsible environmental policy maker, one must have some background in the science of the environment.

The environmental policy track has a strong international emphasis, and there are opportunities to combine language studies with analysis of environmental issues in countries where Lawrence has off-campus programs — e.g., Russia, Senegal, Costa Rica, Tanzania.

The minor in environmental studies is designed to complement a major in any field.

ENVIRONMENTAL STUDIES

2010-2011 Course Catalog

Required for the environmental studies major

Required core courses

1. Environmental Studies 150: *Introduction to Environmental Science*
2. Environmental Studies 300: *Symposium on Environmental Topics*
3. Environmental Studies 650: *Environmental Studies Senior Seminar*
4. Mathematics 107 or 117: *Elementary Statistics* or Mathematics 207: *Introduction to Probability and Statistics* or Biology 280: *Experimental Design and Analysis*
5. Economics 100: *Introductory Economics: Microeconomic Emphasis* or Economics 300: *Microeconomic Theory*
6. Economics 280: *Environmental Economics* or Economics 480: *Advanced Environmental Economics* or Economics 285: *Natural Resource Economics*
7. Government 380: *Introduction to Public Policy*
8. One of the following courses emphasizing historical, social, and philosophical perspectives on environmental issues:
    - Environmental Studies 270/Government 270: *Global Environmental Politics*
    - Environmental Studies 360/Philosophy 360: *Environmental Ethics*
    - Environmental Studies 365/Anthropology 310: *Ecological Anthropology*
    - Environmental Studies 460/Education Studies 400: *The Environment, Community, and Education*
    - Environmental Studies 470/Government 465: *Environmental Politics*
    - Environmental Studies 355/History 355: *History of the American Environment*
9. One Environmental Studies cross-listed course [may include independent study]
10. Field experience (not necessarily for credit; typically about 50 hours of work outside the classroom or participation in an ENST-related internship or off-campus program; documentation must be submitted to advisor and chair)

Environmental Policy Track

1. Two of the following introductory science courses, from two different departments
    - Biology 110: *Principles of Biology*
    - Geology 110: *Introductory Geology*
    - Chemistry 115: *Principles of Chemistry: Structure and Reactivity*, Chemistry 116: *Principles of Chemistry: Energetics and Dynamics*, or Physics 141 *Principles of Classical, Relativistic, and Quantum Mechanics* or Physics 151 *Principles of Classical Physics*.
2. Three additional six-unit courses numbered above 200 from the economics department or three additional six-unit courses numbered above 200 from the government department (not including courses taken to complete another category)

ENVIRONMENTAL STUDIES

Environmental Science Track

1. Two of the following introductory science courses, from two different departments
    - Biology 110: *Principles of Biology*
    - Geology 110: *Introductory Geology*
    - Chemistry 115: *Principles of Chemistry: Structure and Reactivity*, Chemistry 116: *Principles of Chemistry: Energetics and Dynamics*, or Physics 141: *Principles of Classical, Relativistic, and Quantum Mechanics* or Physics 151: *Principles of Classical Physics*.
2. Three additional six-unit courses numbered above 200, within one science department (not including courses taken to complete another category)

Required for the environmental studies minor

1. Environmental studies core courses
    a. Environmental Studies 150: *Introduction to Environmental Science* and
    b. Environmental Studies 300: *Symposium on Environmental Topics*
2. Foundation courses in natural sciences
   Choose two of the following:
    - Geology 110: *Introductory Geology*
    - Biology 110: *Introductory Biology*
    - Chemistry 115: *Principles of Chemistry: Structure and Reactivity* or Chemistry 116: *Principles of Chemistry: Energetics and Dynamics*
    - Physics 141: *Principles of Classical, Relativistic, and Quantum Mechanics* or Physics 151: *Principles of Classical Physics*

3. Foundation courses in social sciences
    - Economics 100: *Elements of Economics: Microeconomic Emphasis* or Economics 285: *Natural Resource Economics* or Economics 300: *Microeconomic Theory* or Environmental Studies 280: *Environmental Economics*
    - Government 380: *Public Policy* or Environmental Studies 470: *Environmental Politics* or Environmental Studies 270: *Global Environmental Politics*
4. Courses with significant emphasis on environmental topics: Any two environmental studies cross-listed courses. Environmental studies courses taken through Lawrence-sponsored off-campus programs, such as the Semester in Environmental Science may also fulfill this requirement, with approval of the Environmental Studies Steering Committee. Special note: No more than three courses may be applied simultaneously toward completion of this minor and a student's major.
5. C average in the minor

***Senior Experience* in Environmental Studies**
The *Senior Seminar* (ENST 650) is the culmination of the Environmental Studies major and serves as the program's *Senior Experience*. Through discussions of primary literature and guest lectures, students are engaged with cutting-edge scholarship in the natural sciences, social sciences, and the humanities. Students also complete individual projects, which consist of developing temporal or spatial models of environmentally relevant phenomena. In the course of modeling, students must find and acquire relevant data, determine functional relations between model elements, perform sensitivity analyses, and justify their choices and assumptions. Results and conclusions are presented orally and in a written document. The 6-unit course is offered once a year and has ENST 150 and ENST 300 as prerequisites.

ENVIRONMENTAL STUDIES

Courses

ENST 115
Energy Technology, Society, and the Environment
Explores energy production, storage, and usage as they are currently practiced. Certain emerging technologies will also be addressed. Environmental and socio-economic impact will be discussed in the context of limitations imposed by the laws of physics. Units: 6.

Also listed as Physics 112

ENST 150
Environmental Science
Presents principles of biology, chemistry, and geology that relate to such environmental issues as resource limitation, pollution, and environmental degradation. Designed to foster understanding of scientific measures of environmental quality. One laboratory per week. Units: 6.

Also listed as Geology 150

Prerequisite: Freshman or sophomore standing; consent of instructor required for juniors and seniors

ENST 160
The Ice Ages
This course focuses on the dynamic environment of the ice age periods in Earth history. Emphasis on the historical discovery of the ice ages, their possible causes, and their global effects on ecosystems on land and in the sea. One-day field trip to local glacial deposits. Units: 6.

Also listed as Geology 160

ENST 202
Geology and Health
A course investigating the links between geology and health, considering topics such as asbestos, natural and anthropogenic water contamination, and cycling of trace elements as both contaminants and necessary nutrients. Designed to illuminate the link between the seemingly disparate fields of geology and the health of life on earth. Units: 6.

Also listed as Geology 213

Prerequisite: GEOL 110

ENST 205
Readings in Nature
A course in reading and writing about the natural world. Readings will be of complete texts and may include such works as Wendell Berry's *The Memory of Old Jack,* Barry Lopez's *Crossing Open Ground,* and Gretel Erlich's *The Solace of Open Spaces.* Discussion and analysis of texts will be combined with written reflections upon natural, urban-natural, or urban landscapes and individuals. Units: 6. Prerequisite: Sophomore standing

ENVIRONMENTAL STUDIES

ENST 206
East Asian Classics in Translation
This introductory course explores encounters with nature in East Asian texts through close reading of primary texts in English translation—Taoist philosophy, lyric poetry, personal memoirs, fiction and film—from the traditional periods of China and Japan, ending with a contemporary Japanese novel set in 1980s suburban Tokyo. Particular attention is paid to literary form, voice, aesthetic concerns, and issues relating to humans' relationship with nature. Units: 6.

Also listed as East Asian Studies 260, Chinese and Japanese 260

Prerequisite: Sophomore standing; EAST 140 recommended

ENST 210
Animal Behavior
A lecture and field-study course examining the principles and problems of animal behavior. Subjects include orientation, feeding, locomotion, communication, escape in time and space, biological rhythms, mate choice, and aspects of social behavior, examined from evolutionary, ontogenetic, physiological, ecological, and ethological perspectives. Lecture and laboratory. May be taken separately or as part of the Marine Biology Term. Units: 6.

Also listed as Biology 200

Prerequisite: BIOL 140

ENST 211
Biodiversity
The influence of climate on global habitats is considered. Selected terrestrial life zones, including neotropic, paleotropic, montane, desert, cold temperate, and warm temperate, are analyzed and stresses produced by climate and habitat evaluated. Adaptive responses at the morphological and physiological levels are investigated and scientific principles are applied to contemporary ethical issues, including restoration and conservation ecology. Lecture only. Units: 6.

Also listed as Biology 210

ENST 212
Physiological Ecology
Biological stresses induced by environmental variables are described. Physiological and molecular adaptations associated with flowering, disease resistance, pollination, germination, and nutrient uptake and partitioning are discussed and investigated, using both field and laboratory experience. Lecture and laboratory. Units: 6.

Also listed as Biology 231

Prerequisite: BIOL 110

ENVIRONMENTAL STUDIES

ENST 213
Evolutionary Biology
A study of biological evolution, including natural selection, adaptation, the evolution of sex, speciation, extinction, and constraints on evolutionary change. Readings include classic and current literature. Two lectures and one discussion per week. Units: 6.

Also listed as Biology 235

Prerequisite: BIOL 120, BIOL 140, ANTH 140 or consent of instructor

ENST 214
The Vegetation of Wisconsin
The principles of plant-environment interrelationships are developed through extensive field study of Wisconsin vegetation. Emphasis is placed on the manner in which physical and biological factors influence competition, adaptation, and structure in major local habitats. Lecture and laboratory. Units: 6.

Also listed as Biology 250

ENST 220
General Ecology
An introduction to the interactions between organisms and the environment, exploring the role of physical, chemical, and biotic processes, including human activities, in determining the structure and function of populations, communities, and ecosystems. Topics will include resource availability, competition, predation, symbiosis, and natural and anthropogenic disturbances such as disease, biological invasions, pollution, and climate change. Lecture and laboratory. Units: 6.

Also listed as Biology 230

ENST 222
Atmospheric & Environmental Chemistry
This course focuses on the fundamental chemical processes that control Earth's atmosphere, ocean, soil, and climate. The course emphasizes the mechanisms that regulate the flow of energy in different ecosystems, the environmental role of particulate matter and solar radiation, chemistry-climate relationships, and the anthropogenic impact on the environment. Units: 6.

Also listed as Chemistry 212

Prerequisite: CHEM 116

ENST 230
History of the Earth and Life
A study of the physical, chemical, and organic evolution of the Earth since its origin 4.5 billion years ago, with emphasis on times of change and crisis. The course also examines the evolution of ideas about Earth’s history, illustrating how science and culture are inherently entangled. Units: 6.

Also listed as Geology 210 Prerequisite: GEOL 110

ENVIRONMENTAL STUDIES

ENST 235
Weather, Climate, and Climate Change
A study of basic meteorologic principles and climate patterns. These phenomena will be discussed in relation to evidence of past climate change and implications of global warming on future climate. Units: 6.

Also listed as Geology 214

Prerequisite: GEOL 110 or 150

ENST 237
Environmental Remote Sensing and GIS Applications
Fundamentals of electromagnetic radiation and the interaction of radiation with matter are introduced as the basis of remote sensing. Interpretation and manipulation of remotely sensed images are used to demonstrate the wealth of information remote sensing provides. Applications and case studies from geology, environmental science, ecology, agronomy, and urban planning will be explored. High school physics recommended. Units: 6.

Also listed as Geology 220

Prerequisite: GEOL 110; high school physics recommended

ENST 240
Chemistry of the Earth: Low-Temperature Environments
A detailed introduction to properties of geologically and environmentally important minerals. Emphasis is placed on mineral properties, tools of mineral identification, mineral associations, and chemical reactivity of minerals in earth surface and near-surface environments. One lab per week. Units: 6.

Also listed as Geology 240

Prerequisite: GEOL 110 and CHEM 115

ENST 245
Conservation Biology
This course explores the scientific concepts related to the conservation and restoration of the Earth's biological diversity. Topics include patterns of species and ecosystem diversity, the relationship between biodiversity and ecosystem functioning, causes of extinction, assessing extinction risk, behavioral indicators, *in-situ* and *ex-situ* management strategies for endangered species, and ecosystem restoration. Lecture only. Units: 6.

Also listed as Biology 245

Prerequisite: BIOL 110 and one other course in the natural sciences

ENVIRONMENTAL STUDIES

ENST 247
The Elements of Life
A seminar that introduces the biological chemistry of some 20 elements, mostly “inorganic,” that living systems incorporate and require, touching upon the topics of uptake, selectivity, compartmentalization, control, energetics, catalysis, structure, and toxicity. Students will draw from the text to elucidate in class the biological roles of individual elements. No laboratory. Units: 6.

Also listed as Chemistry 247

Prerequisite: CHEM 116 or 119 or consent of instructor

ENST 250
Analytical Chemistry
A course in the fundamental principles of quantitative analysis, stressing both chemical and instrumental techniques. Emphasis on application of analytical chemistry to practical problems, including environmental issues, food science, biochemical systems, and industrial processes. Opportunities for individually designed projects. Lectures and two laboratories per week. Units: 6.

Also listed as Chemistry 210

Prerequisite: CHEM 116 or 119 or consent of instructor

ENST 260
Research Methods in Archaeology
Presents the research process in archaeology and offers an overview of essential data-collection and analysis techniques, including site survey and excavation, settlement pattern analysis, lithic analysis, and ceramic analysis. Students work with material from the Lawrence University collections and take part in field research. Units: 6.

Also listed as Anthropology 220

Prerequisite: ANTH 110, 120, or 140, preferably all three; non-anthropology majors must obtain consent of the instructor. Recommended for anthropology majors in the sophomore year; must be completed by the end of the junior year.

ENST 270
Global Environmental Politics
This course provides an examination of the environment as an issue in world politics. Emphasis will be placed on the role of both state and non-state actors (*i.e.,* the UN, NGOs) in global environmental regimes that are designed to deal with global warming, ozone depletion, and other environmental issues. Particular attention will be paid to the positions taken by both developed and developing countries. As part of the course, students will participate in a simulation of an international negotiation on an environmental issue. Units: 6.

Also listed as Government 270

Prerequisite: Sophomore standing or ENST 150 or GOVT 110

ENVIRONMENTAL STUDIES

ENST 280
Environmental Economics
An analysis of the problems associated with market and governmental allocation of natural and environmental resources. The course explores the use of externalities, cost-benefit analysis, and various governmental policy tools to analyze actual effects (efficiency and equity implications) of environmental policies on our economy. The course includes extensive analyses of ongoing environmental issues. Units: 6.

Also listed as Economics 280

Prerequisite: ECON 100; sophomore standing recommended

ENST 285
Natural Resource Economics
This course explores the economics of both exhaustible and renewable natural resource extraction. Topics include oil and mineral extraction, fisheries, forest and water management, and biodiversity. The course includes extensive study of current issues associated with the use of natural resources through a group project Units: 6.

Also listed as Economics 285

Prerequisite: ECON 100; sophomore standing recommended

ENST 300
Symposium on Environmental Topics
The heart of this course is an annual symposium organized around a well-defined topic with both scientific and policy components — *e.g.,* nuclear waste disposal, global warming. Each year, two or three nationally recognized experts on the selected topic are brought to campus. In the weeks before a visit by one of the major speakers, students, together with environmental studies faculty, read and discuss papers suggested by the speaker. The speakers meet with students in the seminar following their public lecture, providing students with an opportunity to interact directly with scientists and policy makers at the forefront of environmental issues. Units: 6.

Prerequisite: ENST 150, sophomore standing

ENST 310
Aquatic Ecology
The principles of the ecology of fresh waters, developed through discussions, laboratory, and field investigations of the functional relationships and productivity of biotic communities as they are affected by the dynamics of physical, chemical, and biotic parameters. Lecture and laboratory. Units: 6.

Also listed as Biology 330

Prerequisite: BIOL 120, 140, or 230

ENVIRONMENTAL STUDIES

ENST 320
Seminar in Selected Topic in Environmental Studies
A course designed to offer students an opportunity to study important issues in environmental studies not covered in other regularly offered courses. Activities may include the reading and analysis of material from primary literature, consideration of interdisciplinary connection, and field and laboratory activites.

Seminar for Winter 2010: China's Water
This course is intended for students who have participated in the study tour of water issues in China in December 2009. Students will be completing reports on water quality and management issues in China and presenting their findings.

Seminar For Spring 2010: Farm City-A Community Read
The Environmental Studies program is sponsoring a community read for the spring term of 2010. We will be reading Novella Carpenter's *Farm City: The Education of an Urban Farmer*, a memoir sharing stories from the authors farm (complete with bees, vegetables, turkeys, rabbits, and pigs) on an abandoned lot in Oakland, California. Multiple sections will be created to foster small group discussions of this work. The class will meet once per week for the first half of the spring term. The author will be on campus during April, affording participants the opportunity to meet and interact with her.

Units: Variable.
Prerequisite: ENST 150 or consent of instructor.

ENST 330
Advanced Geochemistry
A more detailed investigation of geochemical principles and processes through the investigation of important geochemical issues. Readings come heavily from the primary literature. Units: 6.

Also listed as Geology 340

Prerequisite: GEOL 240 and CHEM 115, or consent of instructor; CHEM 116 recommended

ENST 335
Physics of the Earth: Surface Environments
This course studies the movement of water, solute, and sediment through the landscape and the resulting properties and distribution of surficial earth materials and landforms. Topics include weathering; soil development; runoff; mass movement; river, glacial, and coastal processes; and deposition in sedimentary environments. One lab per week. Units: 6.

Also listed as Geology 360

Prerequisite: GEOL 110 and 240 or consent of instructor; PHYS 120 or 150 recommended

ENVIRONMENTAL STUDIES

ENST 345
Terrestrial Field Ecology
A hands-on course intended to demonstrate basic ecological principles using local terrestrial ecosystems. Field research projects will introduce students to methods in hypothesis development, experimental design, data collection, statistical analysis, and scientific writing and presentation. Research topics will include estimating population size, community structure, plant-animal interactions, and foraging behavior. Lecture and laboratory. Units: 6.

Also listed as Biology 345

Prerequisite: BIOL 120 or BIOL 140 and sophomore standing

ENST 350
Islands and Isolation
This course examines islands and the situation of isolation across the fields of geology, evolutionary biology, and human geography. Topics include island formation, dynamics of isolated natural and human populations, and the historical importance of islands in the study of natural history. The course includes laboratories and field trips. Units: 6.

Also listed as Biology 350, Geology 350

Prerequisite: Any of the following: ANTH 120, ANTH 140, BIOL 210, BIOL 235, BIOL 245, GEOL 210, GEOL 260 or consent of instructor

ENST 355
History of the American Environment
North Americans have transformed the environment while being shaped by nature in turn. This course surveys the changing relationships between Americans and their physical environment in historical context from the 17th century to the present. Topics include the “Columbian exchange,” agriculture, urbanization, conservation, and the emergence of contemporary environmentalism. Units: 6.

Also listed as History 355

Prerequisite: Sophomore standing

ENST 360
Environmental Ethics
An examination of some ethical assumptions that might figure in discussions of environmental policy by economists, legal experts, philosophers, and policy scientists. Units: 6.

Also listed as Philosophy 360

Prerequisite: One course in economics, government, or philosophy; junior standing; or consent of instructor

ENVIRONMENTAL STUDIES

ENST 365
Ecological Anthropology
A study of relationships between human communities and their natural environments (*i.e.,* humans studied as members of ecosystems). Topics include the interactions between environment, human biology, and social organization and anthropological perspectives on global environmental problems. Units: 6.

Also listed as Anthropology 310

Prerequisite: One anthropology course or consent of instructor

ENST 380
Ecological Modeling
An introduction to the process of developing mathematical descriptions of the interactions between components of a population, community, or ecosystem, and the use of computer simulation as a tool for understanding ecology and natural resource management. Topics include population growth, predator-prey and competitor interactions, and mass balance in ecosystems. Units: 6.

Also listed as Biology 380

Prerequisite: BIOL 230, 245, 330, or 345

ENST 410
Ecological Energetics
Field and laboratory experimental investigations of the transfer and transformation of energy or energy-containing materials between and within organisms and populations of aquatic ecosystems. Part of the Marine Biology Term. Lecture and laboratory. Units: 6.

Also listed as Biology 434

Prerequisite: BIOL 330, concurrent enrollment in BIOL 505 and 200, and consent of instructor

ENST 425
Prehistoric Human-Environment Interactions
This course focuses on the interrelationships between prehistoric humans and their environment on a variety of temporal and geographic scales. Topics include the detection and analysis of prehistoric environmental degradation, the possible impacts of natural and anthropogenically induced environmental change on prehistoric humans, and the modern significance of such interrelationships. Units: 6.

Also listed as Geology 425

Prerequisite: GEOL 110 or GEOL 150 or ENST 150 or ANTH 120

ENVIRONMENTAL STUDIES

ENST 426
Biogeography
Students will learn about past and present geographic distribution of plants, animals, and other organisms throughout the history of the earth and how these patterns can be reconstructed. An in-depth understanding of the basic controls on species distributions is vital to predicting future impacts of global climate change on ecological systems and is a key aspect of effective conservation efforts. Units: 6.

Also listed as Geology 426

Prerequisite: One of GEOL 110, ENST 150, BIOL 110, BIOL 120; or consent of instructor

ENST 427
Paleolimnology
Students will learn about the study of lake systems through time. This includes lake formation, changes in watershed vegetation, water chemistry, hydrology, and disturbance regimes. The course will consist of a mixture of lectures, field trips, and labs. Students should be prepared to go on field trips to local lakes where we will recover sediment cores for analysis during the term. One lab per week. Units: 6.

Also listed as Geology 427

Prerequisite: GEOL 110 or ENST 150 or consent of instructor

ENST 430
Watershed Hydrology
An introduction to the basic components of the hydrologic cycle, focusing on surface water and groundwater systems. Measurement and analysis of hydrologic data are emphasized. Application to contemporary issues such as flooding, watershed development, and groundwater contamination will be discussed. Units: 6.

Also listed as Geology 430

Prerequisite: GEOL 110; PHYS 120 or 150 recommended

ENST 449
Nature and the Environment in German Literature (in English)
This course examines the literary, philosophical, and sociological history of ecological issues in Germany. Students investigate the formulation of the specifically German concept of nature and study the roles of Romanticism and of the early 20th-century youth movement in shaping contemporary environmental debates. Taught in English. German majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in German. Units: 6.

Also listed as German 449

ENVIRONMENTAL STUDIES

ENST 450
Nature and the Environment in German Literature
This course examines the literary, philosophical, and sociological history of ecological issues in Germany. Students investigate the formulation of the specifically German concept of nature and study the roles of Romanticism and of the early 20th-century youth movement in shaping contemporary environmental debates. Taught in German. Units: 6.

Also listed as German 450

Prerequisite: GER 312 or consent of instructor

ENST 460
The Environment, Community, and Education
A study of education, the creation and maintenance of community, and the development of ecological intelligence. Emphasis on how schools respond to their surroundings, the extent to which modern forms of education "fit" students to live in local communities, and the idea of community as a sense of place. Emphasis will also be placed on cultural assumptions about the environment implicit within the curriculum, the effect of schooling on students' understanding of and relationship to the environment, and the role of education in promoting ecological and social sustainability. Units: 6.

Also listed as Education Studies 400

Prerequisite: Sophomore standing or consent of instructor

ENST 470
Environmental Politics
An examination of the politics of environmental policy in the United States, including the organization and demands of the environmental movement and its opponents, the ways in which major actors and institutions in the U.S. system treat environmental issues, and such specific topics as environmental justice and the application of cost-benefit reasoning to environmental policy making. Units: 6.

Also listed as Government 465

Prerequisite: GOVT 380 and either ECON 100 or ECON 300 or consent of instructor

ENST 505
Coral Reef Environments
Examines the ecology of coral reef environments. Lecture, laboratory, and field components. Part of the Marine Biology Term. Lecture and laboratory. Units: 6.

Also listed as Biology 505

Prerequisite: BIOL 330 and concurrent enrollment in BIOL 200 and BIOL 434

ENVIRONMENTAL STUDIES

ENST 560
Practicum in Environmental Studies
Practical experience working in either environmental policy development or environmental science fieldwork in a community. For example, students might work with businesses, trade organizations, state or local government, or non-profit advocacy groups. Students spend a minimum of ten hours per week at assigned settings and attend weekly supervision meetings with instructor. Practica can be done during the academic year (at local placements or on campus) or during the summer (at off-campus placements). Units: 6.

Also listed as Government 550

Prerequisite: Sophomore standing and one course on environmental policy or law, including GOVT 206/ENST 302 or GOVT 306/ENST 301

ENST 650
Environmental Studies Senior Seminar
A seminar on issues and methods of environmental studies and a focal point of the environmental studies major. Topics include scientific measures of environmental quality, natural resource management, pollution, prices, and public policy and ethical considerations. Students employ data and models to address a chosen environmental problem. Faculty members from contributing disciplines participate. Units: 6.

Prerequisite: ENST 150, ENST 300, and senior standing; or consent of the instructor

ENST 390,590, 690
Tutorial in Environmental Studies
Advanced study and analysis of a particular topic or case related to environmental issues, viewed from the perspective of more than one academic discipline. Units: Variable.

Prerequisite: Counter Registration Required.

ENST 191, 391, 591, 691
Directed Study in Environmental Studies
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

ENST 195, 395, 595, 695
Internship in Environmental Studies
An opportunity for environmental studies students to gain practical experience in the commercial, government, or nonprofit sectors. The internship is supplemented by readings and discussions with a supervising faculty member. At the conclusion of the internship, the student must submit a summative report that considers the internship experience in the context of the student’s other academic work. Units: Variable.

Prerequisite: Counter Registration Required.

ENVIRONMENTAL STUDIES

ENST 399, 599, 699
Independent Study in Environmental Studies
Advanced independent research, under the guidance of a faculty mentor or mentors, on a particular topic related to the environment. The student is required to produce a formal paper or equivalent (*e.g.,* poster session, Web page, presentation at a professional meeting) as a tangible record of the work carried out. Units: Variable.

Prerequisite: Counter Registration Required.

ETHNIC STUDIES

Associate professors: Blitstein (History, chair), Daughtry* (Anthropology), Hoffmann (English), Purkey (Education, Bee Connell Mielke Professorship in Education), Vetinde (French and Francophone Studies)

* On leave Term(s) I, II, III

Ethnicity — that is, the identification with a group due to factors such as common language, customs, beliefs, religion, historical experience, kinship ties, and race — is increasingly becoming the challenge of the new century. Within the United States, race became, as W. E. B. DuBois had predicted, perhaps the central problem of the 20th century, and the influx of immigrants of various ethnic groups has continually complicated the socioeconomic landscape. Contemporary international conflicts often take the form of ethnic conflicts; we only need look at the recent problems in Bosnia or Rwanda to understand that ethnic relationships are influential factors in many areas of the world.

This interdisciplinary minor explores topics such as the meaning of ethnicity and race; the impact of ideas about ethnicity and race; and the definition, experience, and interactions of ethnic groups. The curriculum is guided by a variety of questions, including the following: Is our identity determined by our biology? How much of our identity is socially constructed? How do ideas about ethnicity and race affect our sense of identity? Is there a significant difference between ethnicity and race? How do individuals come to understand and to express their ethnic identity? How do the experiences of ethnic groups in the United States compare to those in other areas of the world? What are the political, economic, and social consequences of one's racial or ethnic identity? Do these consequences change through time and place? How can we promote better relationships among racial and ethnic groups, in the United States and abroad?

Students may elect to enter the program through one of two interdisciplinary courses, one emphasizing the social sciences and humanities (ETST 200), the other emphasizing the fine arts and humanities (ETST 210).

2010-2011 Course Catalog

Required for the minor in ethnic studies

1. One of the two core courses:
    a. Ethnic Studies 200: *Race and Ethnicity in the United States*
    b. Ethnic Studies 210: *Expressions of Ethnicity*
2. Four additional courses, at least one from each of two categories – domestic and global – and representing course work from at least two different departments. No more than two courses may count toward the student's major. A student may choose to do the second core course as one of the electives.
    a. *Domestic:* courses that focus on the experience of a major ethnic group in thE United States or on relations among ethnic groups in the United States:

        i. Ethnic Studies 222: *History of the American West*
        ii. Ethnic Studies 240: *Sociology of Education*
        iii. Ethnic Studies 241: *Ethnicity, Cultural Diversity, and Education*
        iv. Ethnic Studies 321: *Race Relations in the United States, 1865-Present*
        v. Ethnic Studies 330: *Indians of North America*
        vi. Ethnic Studies 360: *Survey of African American Literature*

vii. Ethnic Studies 380/381: *"Ideal Immigrants"? The German Experience in America*
viii. Ethnic Studies 420: *The American Civil War*
ix. Ethnic Studies 430: *American Indians on Film*
x. Ethnic Studies 561: *Literature of the Harlem Renaissance*

b. *Global:* courses that focus on the experience of ethnicity and relations among ethnic groups outside the United States or comparative courses that include both the United States and other parts of the world:

i. Ethnic Studies 121: *Traditional East Asian Civilization*
ii. Ethnic Studies 221: *Europe in the Age of Nationalism, World War, and Totalitarianism, 1851-1990*
iii. Ethnic Studies 223: *Nationalism In Modern History*
iv. Ethnic Studies 230: *Ethnography of Sub-Saharan Africa*
v. Ethnic Studies 251: *Immigration and Refugees: Changing the Face of Europe*
vi. Ethnic Studies 320: *Empire and Nation in Russian History*
vii. Ethnic Studies 322: *Modern Japanese History*
viii. Ethnic Studies 325: *Ethnicity in Latin America*
ix. Ethnic Studies 332: *Ethnography of the Middle East and North Africa*
x. Ethnic Studies 334: *Race and Ethnicity in East Africa*
xi. Ethnic Studies 382: *The Literature and Culture of Ethnic Minorities in Germany*
xii. Ethnic Studies 480: *Latin American Civilization and Culture*
xiii. Ethnic Studies 481: *Spanish Civilization and Culture*
xiv. Ethnic Studies 560: *Contemporary British and Post-Colonial Fiction*
xv. Ethnic Studies 583: *Hispanic Issues*
xvi. Ethnic Studies 584: *Black Cultural Nationalisms*

No more than two courses used for the minor may count toward the student's major, and no more than two courses may be taken from one department.

3. C average in the minor

***Senior Experience* in Ethnic Studies**
Student may choose one of the five following options in consultation with the program's steering board:

a. ETST 695: *Ethnic Studies Field Experience (course proposed) – three units. Includes work in the community, such as tutoring on the Oneida Reservation, accompanied by a written reflection on the experience. Must be supervised by an Ethnic Studies faculty member.*
b. Upper-level independent study in Ethnic Studies for at least three units, supervised by an Ethnic Studies faculty member
c. Participation in the ACM Urban Studies program. Students are required to submit a written reflection on an aspect of the program that directly relates to issues of race and/or ethnicity.
d. Education 565: *Methods, Materials, and Assessment in Teaching English to Speakers of Other Languages*

e. Student teaching in an ethnically diverse K-12 classroom or program. Students are requested to submit a written reflection on an aspect of the experience that directly relates to issues of race and/or ethnicity.

Courses

ETST 120
Modern Africa Since 1800
The history of Africa from the end of the trans-Atlantic slave trade to the present. We will discuss the effects of abolition on Africa, the nature of pre-colonial African societies on the eve of conquest, the European "Scramble for Africa," the colonial era, African nationalism and decolonization, and the post-colonial period. Themes will cover social, political, economic, and religious history. Units: 6.

Also listed as History 125

ETST 121
Traditional East Asian Civilization
An introductory survey of East Asia from the dawn of indigenous civilization to the 16th century. Focus on the growth of a Sinitic center and its interaction with the sedentary and nomadic peoples on its Inner Asian and Pacific rims. Emphasis on the diverse peoples and societies of the area and the historical processes that bound them together through a common tradition. Units: 6.

Also listed as History 160, East Asian Studies 140

ETST 135
American Indian History: Pre-Contact to 1830
An introductory survey exploring American Indian history from the period preceding contact with African and Europeans to the era of removal. Focuses on the social, cultural, political and economic diversity of native peoples and their experiences with European colonialism. Units: 6.

Also listed as History 135

ETST 136
American Indian History 1830 to the Present
This is an introductory survey exploring American Indian history from the removal era to the present. This course explores the social, political, and economic challenges Native people faced as a result of American expansion and colonialism. It focuses on the ways in which American Indian communities transformed in response to these changes, as well as their persistence and integrity as tribal nations in the present. Units: 6.

Also listed as History 136

ETHNIC STUDIES

ETST 200
Race and Ethnicity in the United States
An interdisciplinary study of race and ethnicity in the United States. The course examines the development of racial and ethnic categorization; patterns of stratification; and the role of political, cultural, and economic forces in shaping ideas about race and ethnicity. The course will explore the social consequences of race and ethnicity with particular attention to racial and ethnic tolerance, discrimination, and institutional racism. The Civil Rights Movement, affirmative action, and immigration policies will be analyzed, as well as connections between ethnic stratification, class, and gender. Other topics will vary from term to term. Units: 6.

ETST 210
Expressions of Ethnicity
An introductory course in which film, theatre, literature, visual arts, and music are analyzed in an effort to explore the many ways in which ethnicity is expressed, reflected, and constructed in American culture. Issues of identity, authenticity, impersonation, commodification, stereotypes, integration, and audience will be raised. Units: 6.

ETST 221
Europe in the Age of Nationalism, World War, and Totalitarianism, 1851-1990
An examination of European history from the Age of National Unification through the collapse of the Soviet Empire. Topics include imperialism, the two World Wars, the Russian Revolution, fascism, totalitarianism, mass nationalism, and the reemergence of eastern and central Europe. Units: 6.

Also listed as History 275

Prerequisite: Sophomore standing or consent of instructor

ETST 222
History of the American West
This course examines realities and images of the frontier/western experience from exploration and settlement of North America through the present. Included are native and immigrant groups, technology, transportation, agriculture, mining, and urbanization, as well as effects of the frontier on national character. Units: 6.

Also listed as History 330

Prerequisite: Sophomore standing

ETST 223
Nationalism in Modern History
An examination of the idea and the reality of nationalism in modern history. Among the questions we will ask are: Is nationalism a modern phenomenon, or does it have pre-modern origins? Is it compatible with democracy and human rights or fundamentally hostile to them? Is it primarily a European phenomenon transplanted to other places, or are there indigenous roots of nationalism throughout the world? We will attempt to answer these questions by reading theoretical works on nationalism from a variety of disciplines and by examining historical case studies. Units: 6.

Also listed as History 295 Prerequisite: Sophomore standing or consent of instructor

ETHNIC STUDIES

ETST 225
Indigenous Peoples in Comparative and Global Perspective
This course explores the diverse geographic, economic, legal, political, social and historical consequences of European expansion and colonialism for indigenous peoples globally. It examines this colonialism through theoretical frameworks, while also investigating its historical, political and social dynamics. Using case studies from around the world, this course concentrates on the ways in which colonialism affects indigenous peoples and the ways in which they respond to colonial powers. Units: 6.

Prerequisite: Sophomore standing or consent of instructor

ETST 226
Identity Politics and Ethnic Conflict
Are conflicts between identity groups inevitable? Why do outbreaks of violence and ethnic conflict occur when they do? How have governments dealt with diversity and with what consequences? Students will read both new and classic works from the literature on nationalism, identity politics, genocide and post-conflict resolution across the world. Units: 6.

Also listed as Government 226

Prerequisite: Sophomore standing or consent of instructor

ETST 240
Sociology of Education
An examination of the social foundations of education in the United States with particular attention paid to the cultural, political, and economic functions of education in modern society. Other topics include the reproductive function of schooling in a society divided along lines of race/ethnicity and class, schools as sites of cultural production, and the historical tension in the U.S. between “equality” and “excellence” in education. Practicum of 20 hours required. Units: 6.

Also listed as Education Studies 340

Prerequisite: Sophomore standing

ETST 241
Ethnicity, Cultural Diversity, and Education
A study of the experience of children and adolescents from different ethnic, cultural, and economic groups. Emphasis on understanding the social consequences of these differences and how such differences affect educational achievement and attainment. The sources and educational effects of individual, institutional, and systemic racism, sexism, and other forms of prejudice and discrimination will also be examined. Practicum of 20 hours required. Units: 6.

Also listed as Education Studies 350

Prerequisite: Sophomore standing

ETHNIC STUDIES

ETST 280
Survey of Postcolonial Literature
An introduction to major postcolonial works in their literary, historical, and cultural contexts. Readings include novels by African, Asian, and Caribbean authors such as Chinua Achebe, Salman Rushdie, and Jean Rhys. Units: 6.

Also listed as English 280

Prerequisite: Sophomore standing, ENG 150, or consent of instructor

ETST 320
Empire and Nation in Russian History
The course examines the history of ethnically diverse territories referred to as “Russia” from early modern times to 1991. Themes include the formation of the Russian empire, its transformation into the Soviet Union, and its partial collapse in 1991; the meaning of “empire,” “nation,” and “ethnicity” in historical context; and the interaction of Russians with non-Russian peoples in Ukraine, the Baltic States, Central Asia, and the Caucasus. Units: 6.

Also listed as History 315

Prerequisite: Sophomore standing or consent of instructor; HIST 320 or 325 recommended

ETST 321
Race Relations in the United States, 1865-Present
An examination of relations between black and white Americans since Emancipation. Topics will include Reconstruction, the rise of Jim Crow, the Great Migrations, the Civil Rights Movement, urban unrest, and white backlash. Units: 6.

Also listed as History 345

Prerequisite: Sophomore standing and HIST 132

ETST 322
Modern Japanese History, 1868-2000
A discussion course on modern Japanese history from the Meiji Restoration of 1868 to the present. This course focuses on Japanese efforts to build a new, westernized state and society compatible with Japan’s traditional “national polity” and to find a new role in modern East Asia and the world. Units: 6.

Also listed as History 365, East Asian Studies 365

Prerequisite: HIST 165

ETHNIC STUDIES

ETST 325
Ethnicity in Latin America
Explores the coming together of distinct Native, African, and European ethnicities in Latin America, and the resulting creation of new ethnicities. We examine how race has been understood in Latin American history and how attitudes toward race have fundamentally shaped the history of the region. Units: 6.

Also listed as History 378

Prerequisite: Sophomore standing; HIST 178 or HIST 179 recommended

ETST 330
Indians of North America
A cultural study of the Indians of North America, including examination of the impact of European ideas and technology on Indian societies. Emphasis on environmental adaptations, levels of social and cultural complexity, problems of historical interpretation, and the methods and theories of ethnology and their applications to North American cultures. Units: 6.

Also listed as Anthropology 350

Prerequisite: ANTH 110

ETST 332
Ethnography of the Middle East and North Africa
Introduction to the peoples and cultures of the Middle East and North Africa, an area of tremendous cultural, religious, linguistic, and economic diversity. Focus on the nature of ethnography as a research method and key areas of inquiry that have concerned anthropologists working in Arab and Muslim societies. Topics include social organization, tribalism, colonialism, gender, religion, nationalism, ethnic and religious minorities, and the politics of identity. Units: 6.

Also listed as Anthropology 358

Prerequisite: ANTH 110 or consent of instructor

ETST 333
American Indians in Wisconsin
A study of the diverse history, culture, and lived experiences of American Indian people in Wisconsin from pre-contact to the present. Emphasizes the adaptability of Wisconsin Indian communities in response to Euroamerican colonialism as it changed over time and the historical and contemporary relevance of tribal sovereignty and treaty rights. Units: 6.

Also listed as History 333

Prerequisite: Sophomore standing or consent of instructor

ETHNIC STUDIES

ETST 334
Race and Ethnicity in East Asia
This course will explore the use of the concepts of race and ethnicity in China and Japan to show how identity is constructed and used in forging national identity. The course will also examine transnationalism and the formation and articulation of ethnicity in East Asia. Units: 6.

Also listed as History 358, East Asian Studies 358

Prerequisite: Sophomore standing

ETST 360
Survey of African American Literature
A survey of African American literature from slave narratives through contemporary literature. Readings include works by Harriet Jacobs, Frederick Douglass, Langston Hughes, Zora Neale Hurston, Richard Wright, Amiri Baraka, Audre Lorde, and Toni Morrison. Units: 6.

Also listed as English 260

Prerequisite: ENG 150 or its equivalent or sophomore standing

ETST 381
"Ideal Immigrants"? The German Experience in America
This course explores what it used to mean to be German in the United States and what it means today: bratwurst, beer, and Oktoberfest. Students will consider issues raised by 19th-century immigration that still reverberate in Germany and America: cultural pluralism vs. assimilation, linguistic diversity vs. single national languages, citizenship vs. "guest" workers. Taught in German. Units: 6.

Also listed as German 446

Prerequisite: GER 312 or consent of instructor

ETST 382
The Literature and Culture of Ethnic Minorities in Germany
Despite a long-term refusal to open itself to immigration, Germany has become a nation of immigrants and asylum-seekers. The course focuses on how both literature and films, including works by and about minorities in Germany, have dealt with key cultural phenomena: multiculturalism, diversity, acculturation, assimilation, "majority culture," and parallel societies. Units: 6.

Also listed as German 447, Film Studies 447

Prerequisite: GER 312 or consent of the instructor

ETHNIC STUDIES

The American Civil War
A comprehensive examination of the Civil War era between 1840 and 1877. Major themes and topics will include the political crisis leading to secession, the military conduct of the war, the end of slavery, the effects of the war on American society, and Reconstruction. Units: 6.

Also listed as History 470

Prerequisite: Junior standing and HIST 131, or consent of instructor

ETST 430
American Indians on Film
The course examines the ways in which American Indians have been depicted on film. Ethnographic, documentary, and feature films are examined and compared to understand how film has shaped our image of American Indians. Units: 6.

Also listed as Anthropology 470, Film Studies 470

Prerequisite: ANTH 350 or consent of instructor

ETST 480
Latin American Civilization and Culture
A broad introduction to the culture of the Latin American continent and its relations to North American culture. The course presents Latin American civilization, history, economic and political situation, and diverse culture. Emphasis is placed on high cultural manifestations such as art and literature, as well as on the everyday habits of the people. Recommended for students who plan to participate in one of our study-abroad programs in Latin America. Units: 6.

Also listed as Spanish 400

Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor

ETST 481
Spanish Civilization and Culture
An overview of Spanish history followed by examination of various aspects of Spanish culture. A broad introduction to the culture of Spain and its relations to North American culture. The course presents Spanish civilization, history, economic and political situation, and diverse culture. Emphasis is placed on high cultural manifestations such as art and literature, as well as on the everyday habits of the people. Recommended for students who plan to participate in one of our study-abroad programs in Spain. Units: 6.

Also listed as Spanish 405

Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor

ETHNIC STUDIES

ETST 516
Literature and Human Rights
An interdisciplinary investigation of the aesthetics and ethics of representing human rights and their violations in literature and film. Texts include novels, plays, essays, and films on topics such as genocide, torture, and development. Units: 6.

Also listed as English 516

Prerequisite: Junior standing, ENG 280, or consent of instructor

ETST 518
Fictions of Globalization
Is globalization really shrinking the global divide between rich and poor, or is this mere fiction? To explore this question, we will examine contemporary novels and films that showcase individuals in India and China as they grapple with issues such as economic migration, class struggle, and terrorism. Units: 6.

Also listed as English 518

Prerequisite: ENG 280, junior standing, or consent of instructor

ETST 521
Narratives of International News
A study of the literature that re-presents world events in different ways from the mainstream news media. Texts include novels, memoirs, graphic novels, or documentary dramas. Units: 6.

Also listed as English 521

Prerequisite: ENG 280, junior standing, or consent of instructor

ETST 561
Literature of the Harlem Renaissance
A study of poetry, fiction, and essays by African American writers from the era of World War I through the 1930s. Authors include Langston Hughes, Zora Neale Hurston, Claude McKay, Nella Larsen, W.E.B. Du Bois, and others. Units: 6.

Also listed as English 510

Prerequisite: Junior standing, ENG 250 or 260, or consent of instructor

ETST 583
Hispanic Issues
This course covers the main cultural issues in the contemporary Hispanic world. It concentrates on both the Hispanics of Latin America and those of the United States. Through theoretical materials as well as literature, film, historical documents, testimony, etc., this course addresses a variety of subjects related to the Hispanic culture. Taught in Spanish. Units: 6.

Also listed as Spanish 566 Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

ETHNIC STUDIES

ETST 584
Black Cultural Nationalisms
A study of the variations of black cultural nationalisms in the works of francophone writers from Africa and the Diaspora. This course examines the writers, challenge to the “Négritude” school and the ways in which they articulate plural and locational black identities to affirm their unique sense of national belonging. Readings from authors such as Senghor, Cé’saire, Laye, Condé’, Chamoiseau, Contant, and Glissant. Units: 6.

Also listed as French 588

Prerequisite: One 400-level French course or consent of instructor.

ETST 390, 590, 690
Tutorial in Ethnic Studies
Units: Variable.

Prerequisite: Counter Registration Required.

ETST 191, 391, 591, 691
Directed Study in Ethnic Studies
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

ETST 195, 395, 595, 695
Internship in Ethnic Studies
Practical experience working with diverse population, focused on volunteer, policy, or advocacy work. For example, students might volunteer to tutor on the Oneida Reservation, or work with a local immigrant relocation agency. Students work for 5-10 hours a week, depending on the amount of credit being earned, meet periodically with the instructor, and submit a written reflection connecting the experience to their academic work in Ethnic Studies. Units: Variable.

ETST 399, 599, 699
Independent Study in Ethnic Studies
Units: Variable.

Prerequisite: Counter Registration Required.

FILM STUDIES

Professors: Cohen (History, Patricia Harnar Boldt Professorship in Liberal Studies), Fares (Spanish), Peterson (German, chair), Sarnecki (French and Francophone Studies), Troy (Theatre Arts, J. Thomas and Julie E. Hurvis Professorship in Theatre and Drama)
Associate professors: McQuinn (Conservatory of Music), Skran (Government, Edwin & Ruth West Professorship in Economics and Social Science), Spurgin (English, Bonnie Glidden Buchanan Professorship in English Literature), Tapia (Spanish), Vilches (Spanish), Vorenkamp (Religious Studies), Williams (Education), Yang (Chinese and Japanese)
Assistant professors: Carlson (Art and Art History), Lindemann (Art and Art History), Shimon (Art and Art History)
Visiting assistant professor: Guenther-Pal (German)

Film studies regards cinema as both a vital art form and a set of cultural artifacts that can be rigorously analyzed. Although they draw on literary and artistic traditions, films have always had their own identifiable properties and conventions. The courses listed below pay particular attention to the history, analysis, and interpretation of cinema as a key form of modern culture. Film studies courses provide students with background in the theory and criticism of moving images, because without some knowledge of how filmmakers create images, we miss both a deeper level of enjoyment and the opportunity to explore the technical, stylistic, and rhetorical devices that films employ to create and convey meaning.

Film studies invites interdisciplinary approaches. Course offerings in film studies at Lawrence University are drawn from various language departments: Chinese, English, French, German, Russian and Spanish; there are also film courses in the Departments of Anthropology, Art and Art History, History, Theatre Arts and in the Conservatory of Music. Students taking courses in film studies have access to a wide range of interpretive methodologies, national cinemas, film styles and genres, and they can combine an interest in film with almost any discipline in the liberal arts.

Required for the interdisciplinary area in film studies

1. Completion of five courses selected from the list below in which film comprises at least 25 percent of the course material and grading. UNIC 142: Introduction to Film Studies, or its equivalent (French 302, German 277, Spanish 330), is recommended but not required.
2. Students who wish to complete the IA during the current academic year should notify a faculty advisor by the first Friday of Term III. Students will then be expected to present a coherent statement of how the courses selected fit together.

FILM STUDIES

Courses

FIST 100
Introduction to Film Studies
This course provides students with a basic introduction to the vocabulary of film studies and an overview of historical, analytical, and theoretical approaches to film. Students will begin to develop the critical means for engaging with the filmic medium in discussion and writing. These aims will be met through a diverse selection of films rooted in different cultures, times, and ideologies. Units: 6.

FIST 177
Introduction to German Film (in English)
With its pivotal role in the inaugurationof the cinema, knowledge of German film is critical to an understanding of the history of film. Considered as one of the most accessible aesthetic forms, the moving image pervades our everyday lives, and yet we seldom think of what we do as "reading" films. Throughout this course, students will be introduced to the practice of reading German films using three structuring lenses: 1) film and cultural history, 2) formal and generic elements, and 3) film criticism. Units: 6.

Also listed as German 177

FIST 200
Introduction to Film Theory and Criticism
What is the language of film? What is the relationship between spectator and screen? What is the role of film as mass and global phenomena? This course explores basic issues in film theory and criticism that may include auteur theory, genre criticism, apparatus theory, stardom, feminist and queer film theories. Units: 6.

Prerequisite: One of FIST 100, FREN 302, FREN 411, GER 177, GER 277, GER 357, GER 411, SPAN 330; or consent of instructor.

FIST 240
Digital Processes
An introduction to the digital medium focusing on its capacity to convey artistic concepts through the interactive and multimedia capabilities of the Mac computer. Producing still image, video, and web-based projects using the computer screen as a venue are covered. The evolution of technology, new media theory, contemporary art discourse, and visual culture are explored through lectures, readings, discussions, and assignments. Units: 6.

Also listed as Studio Art 240

Prerequisite: ART 100 or ART 110

FILM STUDIES

FIST 260
The Art of Film
A study of the narrative and visual techniques in films selected from masterpieces of modern cinema. Readings in film history, film theory, and film aesthetics along with viewings of approximately ten movies from various periods and countries, by directors such as Eisenstein, Wells, Fellini, Kurasawa, and Truffaut. Units: 6.

Also listed as Theatre Arts 260

Prerequisite: Sophomore standing

FIST 270
Post-Soviet Film (in English)
This course will focus on the works of seminal filmakers in the post-Soviet period. Through the prism of post-Soviet films students will be introduced to contemporary Russian culture and to the issues explored within these cinematic narratives: national identity, gender relations, role of the arts in a post-Soviet society, and the re-examination of Russia's historical and cultural past. Taught in English. Units: 6.

Also listed as Russian 270

FIST 277
Introduction to German Film Studies
With its pivotal role in the inauguration of the cinema, knowledge of German film is critical to any understanding of the history of film. This course is intended to be an introduction both to German cinema and to the discipline of film studies. Considered perhaps as one of the most accessible aesthetic forms, the moving image pervades our everyday lives and yet we seldom think of what we do in the movie theatre as “reading.” Throughout this course, students will be introduced to the practice of reading the filmic text using three structuring lenses: 1) history, 2) formal and generic elements, and 3) film criticism. Units: 6.

Also listed as German 277

Prerequisite: GER 202 or consent of instructor

FIST 300
Reel Men: Masculinity in American Film, 1945-2000
Focusing on an array of well-known American films — “The Maltese Falcon,” “Red River,” “Dr. Strangelove,” “McCabe and Mrs. Miller,” “Chinatown,” “Die Hard,” and “American Beauty” among them — the course will integrate film theory, gender theory, and American history to address the problem of how masculinity has been constructed in American culture since World War II. Not open to students who have previously received, or need to receive, credit for HIST 400. (NA) Units: 6.

Also listed as History 300, Gender Studies 323

Prerequisite: Sophomore level or above.

FILM STUDIES

FIST 302
Cinematically Speaking
French films function as a springboard for readings, discussions, oral presentations, and short critical essays. We will briefly examine the history of French film from 1940 to the present, study cinematic techniques, the vocabulary of cinema, and explore the principal themes. Units: 6.

Also listed as French 302

Prerequisite: FREN 202 or consent of instructor

FIST 305
Film as History and History as Film
An examination, through selected films, of specific moments in European history and an examination of film itself as a source of historical interpretation. Possible "historical moments" include Medieval England, Nazi Germany, and the Holocaust, and possible films include *Becket, The Triumph of the Will,* and *Schindler's List.* Units: 6.

Also listed as History 305

Prerequisite: Sophomore standing or consent of instructor

FIST 330
Introduction to Film
A bridge between intermediate and advanced courses. Intensive discussion, reading, and writing practice using films from a variety of genres (documentaries and feature films, including film adaptations of stories, novels, and plays in Spanish). Emphasis on the analysis of film components and structure and, where relevant, on the interconnections between literary texts and film. Not open to native speakers of Spanish. Units: 6.

Also listed as Spanish 330, Theatre Arts 352

Prerequisite: SPAN 202, its equivalent, or consent of the instructor; not open to native speakers of Spanish.

FIST 340
Intermediate Digital Processes
A continuation of Art 240 with an emphasis on the production of art objects through the use of digital tools. The Mac computer and software are used as an extension of existing art forms such as photography, filmmaking, and book publishing. Lectures, readings, discussions, and assignments focus around the exploration of new media theory and contemporary art issues. Units: 6.

Also listed as Studio Art 340

Prerequisite: ART 240 or ART 245

FILM STUDIES

FIST 350
Modern Chinese Literature and Cinema in Translation
A survey of 20th-century Chinese fiction and cinema. Iconoclastic works of modern Chinese vernacular fiction from 1919 through the post-Cultural Revolution (1966-1976) will be juxtaposed alongside films dealing with the same period, such as *Red Sorghum* (1987) and *Farewell, My Concubine* (1992) made by the so-called Fifth Generation of film directors (born after 1949, when the People's Republic was founded). Class conducted in English. No knowledge of Chinese required. Units: 6.

Also listed as Chinese and Japanese 350, East Asian Studies 350

Prerequisite: Sophomore standing; EAST 150 recommended

FIST 357
Film in Germany (In English)
This course selects from 90 years of filmmaking in Germany. Films range from expressionism to Nazi propaganda and from escapist comedies to avant garde art. Learning to "read" German films critically also means finding out how to understand movies from Hollywood and beyond. Possible topics include "From Caligari to Hitler," "German Literature as Film," and "What Makes Lola Run." Taught in English. German majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in German. Units: 6.

Also listed as German 357, Theatre Arts 351

FIST 361
Vanpires, Monsters, and Man-Eaters (In English)
This course seeks to reveal the ways in which the question of monstrous difference is articulated in a variety of German "texts." Its main goal is to examine the ways that representations of monstrousness are employed to stage complex public and private anxieties as well as to provide an expression of rebellion against various systems of hierarchy. Featured in the works of canonized authors as well as within the realm of popular culture, the representational functions of the monster can provide valuable insight into numerous aspects of German history and psychosexual relations. Units: 6.

Also listed as Gender Studies 361, German 361

FIST 362
Vampires, Monsters, and Man-Eaters
This course seeks to reveal the ways in which the question of monstrous difference is articulated in a variety of German "texts." Its main goal is to examine the ways that representations of monstrousness are employed to stage complex public and private anxieties as well as to provide an expression of rebellion against various systems of hierarchy. Featured in the works of canonized authors as well as within the realm of popular culture, the representational functions of the monster can provide valuable insight into numerous aspects of German history and psychosexual relations. Units: 6.

Also listed as Gender Studies 362, German 362

Prerequisite: GER 312

FILM STUDIES

FIST 400
Reel Men: Masculinity in American FIlm, 1945-2000
At the upper level, the course will serve as a history seminar in preparation for the history department's capstone course. Those taking it at that level will be required to write at least one paper addressing film or gender theory and to write a 10-15 page research prospectus. Not open to students who have previously received credit for HIST 300. Units: 6.

Also listed as History 400, Gender Studies 423

Prerequisite: Junior standing or above

FIST 411
Fascism and Film
This course lets students examine films that were ostensibly made as entertainment or explicitly crafted as propaganda in the historical context of Nazi Germany and occupied France. Aside from learning how governments and their cinematic agents used this relatively new medium to shape public opinion (in support of the war, against Jews, etc.), students will see where and how resistance was possible. Units: 6.

Also listed as French 411

Prerequisite: One course in French at the 300 level or consent of instructor

FIST 412
Fascism and Film (In English)
This course lets students examine films that were ostensibly made as entertainment or explicitly crafted as propaganda in the historical context of Nazi Germany and occupied France. Aside from learning how governments and their cinematic agents used this relatively new medium to shape public opinion (in support of the war, against Jews, etc.) students will see where and how resistance was possible. Units: 6.

Also listed as German 411

FIST 418
Topics in Film Studies
Topics in Film Studies allows for an in depth examination of topics across time, for example, the work of women directors, or it permits a detailed analysis of special topics, for example, Turkish-German or Central European film.

Topic for Spring 2011: Eroticism, Power and Fate in the Cinema of Central Europe This course provides an overview of the cinematic traditions in Central Europe (i.e. present day Czech Republic, Austria, Hungary, Poland, and Slovakia) in cultural, historical, and political context. The themes of eroticism, power, and fate are used as points of orientation to structure the analysis of each film.

Units: 6.

FILM STUDIES

FIST 422
Borrowed Music in the Movies
When a film uses a pre-existing piece of music (popular or classical), meanings multiply, both within and outside the film itself. This course will explore these meanings, focusing on the fluid and reciprocal relationship between film and the music it borrows. Units: 6.

Also listed as Music History 422

Prerequisite: MUHI 201 and MUHI 202

FIST 447
The Literature and Culture of Ethnic Minorities in Germany
Despite a long-term refusal to open itself to immigration, Germany has become a nation of immigrants and asylum-seekers. The course focuses on how both literature and films, including works by and about minorities in Germany, have dealt with key cultural phenomena: multiculturalism, diversity, acculturation, assimilation, “majority culture,” and parallel societies. Units: 6.

Also listed as German 447, Ethnic Studies 382

Prerequisite: GER 312 or consent of the instructor

FIST 470
American Indians on Film
The course examines the ways in which American Indians have been depicted on film. Ethnographic, documentary, and feature films are examined and compared to understand how film has shaped our image of American Indians. Units: 6.

Also listed as Anthropology 470, Ethnic Studies 430

Prerequisite: ANTH 350 or consent of instructor

FIST 540
Advanced Digital Processes
A continuation of Art 340. Advanced work in digital techniques and contemporary art theory. Discussions, readings and projects focus around art issues and conceptual exploration. Project planning and implementation are emphasized as students work toward producing a self-designed project with a developed artist statement. Units: 6.

Also listed as Studio Art 540

Prerequisite: ART 240 or ART 245

FIST 390, 590, 690
Tutorial in Film Studies
Units: Variable.

Prerequisite: Counter Registration Required.

FILM STUDIES

FIST 191, 391, 591, 691
Directed Study in Film Studies
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

FIST 199, 399, 599, 699
Independent Study in Film Studies
Units: Variable.

Prerequisite: Counter Registration Required.

FRENCH AND FRANCOPHONE STUDIES

Professors: Hoft-March** (The Milwaukee-Downer College and College Endowment Association Professorship), Sarnecki (Emerita)
Associate professor: Vetinde (chair)
Assistant professor: Chang*
Instructor: Khawla

* On leave Term(s) II; ** On leave Term(s) III

Goals of the beginning and intermediate sequences in French are comprehension of both the oral and written language beyond an elementary level, development of the capacity to express reasonably complicated thought both orally and in writing, and an introduction to French and Francophone literatures and cultures.

At the advanced level, the student is expected to reach competence in use and knowledge of the French language and to become conversant with French and francophone literatures and cultures. Students will not only familiarize themselves but also engage critically with important intellectual ideas from the French-speaking world as they have evolved across time and space.

From the beginning, French is used extensively, if not totally, in the classroom. Except where specified, all class discussion, essays, and examinations are conducted in French.

2010-2011 Course Catalog

Required for the French major

Students complete a French major by taking a minimum of 60 units beyond French 202, including 12 to 18 units at the 300 level, at least 12 units at the 400 level, and at least 12 units at the 500 level, plus the Senior Seminar. At least 18 of the 400- or 500-level units must be taken on the Lawrence campus.

French majors will be required to attend at least one Björklunden French language immersion weekend in either their junior or senior year. Participation in the immersion experience will allow department members to evaluate majors' levels of proficiency in listening and speaking in a free and unstructured linguistic environment. Students who major in French are also required to attend at least six meetings of the French Table; for one of the Tables they will serve as discussion leader.

Finally, all French majors will be required to assemble a portfolio of a selection of their work in the French program. The portfolio is designed to keep a record of progress over the course of a French major's career in terms of linguistic proficiency, mastery of specific literary and cultural content, and sophistication of ideas.

Portfolios must be submitted by the second week of Term III of the student's senior or super-senior year. The French and Francophone Studies department will receive and approve only completed portfolios, and the portfolio submissions must be in PDF format.

FRENCH AND FRANCOPHONE STUDIES

The French portfolio must include:

1. A list of all courses taken for the major
2. A list of works included in the portfolio
3. A two to three page essay in French that captures the concept of “la francophonie” through discussion of one aspect of cultural production (cinema, literature, media, music, etc.) that distinguishes and yet relates French and Francophone identity.
4. Samples of students' work will be drawn from each of the following categories:
    a. One sample essay from each of the following levels: French 300, French 400, and French 500. At least one of the essays should discuss a Francophone topic.
    b. The student's senior capstone project. A student may request permission to submit a tape or video recording of an oral presentation in place of one essay.

A student may request permission to submit a tape or video recording of an oral presentation in place of one essay.

Required for the French minor
Students complete a French minor by taking a minimum of 36 units beyond French 202, which will include 12 units at the 300 level and at least 6 units at the 400 level and 6 units at the 500 level. A C or above average in the minor also is required.

French minors will be required to attend at least one Björklunden immersion weekend in either their junior or senior year. Participation in the immersion experience will allow department members to evaluate minor’s levels of proficiency in listening and speaking in a free and unstructured linguistic environment. Students who minor in French are also required to attend at least six meetings of the French Table and complete a short project based on work pre-approved by the department. There will be an oral presentation of the project before at least two members of the department.

Finally, students must declare their intent to minor in French in writing to the department chair in their junior year.

Concerning study abroad
The department urges students to take advantage of the international study programs in France, Senegal, or Québec.

Placement Examination
The placement examination for students taking French at Lawrence for the first time is available online at the department’s home page. To take the exam, go to www.lawrence.edu/dept/french/academics.htm and follow the instructions. The exam may be taken on or off campus. Students wishing to place out of the language requirement by proficiency examination should sign up through the department chair for an oral proficiency interview and writing exam in addition to the placement test.

At the beginning and intermediate levels, courses are numbered to indicate relative difficulty, the lowest numbers identifying those that require the least proficiency in French. At the level of French 400 and above, however, students should consult a French instructor.

At whatever level students place, they should plan to begin their study of French in the freshman or sophomore year.

FRENCH AND FRANCOPHONE STUDIES

***Senior Experience* in French and Francophone Studies**
French and Francophone Studies requires a *Senior Experience* that consists of a one-term senior seminar (winter) in which possible research topics are defined and outlined, culminating in a written thesis and an oral, in-class presentation of the student's work. Other types of research projects and interdisciplinary capstones in French may meet the requirement; the possibility of an alternative project must be discussed with the department chair and the student's advisor.

Students pursuing double majors, double degrees, and education certification, are strongly encouraged to consult with their advisors and relevant department chairs to plan and negotiate their overall *Senior Experience* as early as possible. It is imperative that students interested in pursuing an interdisciplinary capstone that integrates their interests in both majors consult with the department chair by fall of the senior or super-senior year.

Courses

FREN 101
Beginning French I
A beginning course designed to give training in reading, writing, speaking, and understanding. This course is for students with no previous training in the French language. It is recommended that students take 101, 102, and 200 in three consecutive terms. Five class meetings per week. Units: 6.

FREN 102
Beginning French II
A continuation of French 101. It is recommended that students take 101, 102, and 200 in three consecutive terms. Five class meetings per week. Units: 6.

Prerequisite: FREN 101

FREN 200
Intermediate French I
A continuation of French 102, structured to help students develop their skills in reading, writing, speaking, and listening. Five class meetings per week. Units: 6.

Prerequisite: FREN 102 or placement by the department

FREN 201
Intermediate French II
Designed to help students attain facility in reading and oral comprehension and mastery of basic skills in writing and speaking. Includes grammar review that continues in French 202. Students with two to four years of high school French or the equivalent should contact the department about placement in this course. Four class meetings per week. Units: 6.

Prerequisite: FREN 200 or placement by the department

FRENCH AND FRANCOPHONE STUDIES

FREN 202
Intermediate French III
A continuation of French 200 or 201, intended to develop further a student's proficiency in the four language skills. Placement determined by examination and consultation with the instructor. Four class meetings per week. Units: 6.

Prerequisite: FREN 200 or 201 or a minumum of three years of high school French or the equivalent

FREN 301
Introduction to French Literary Studies
This course introduces students to a wide range of literary genres through a careful selection of short texts and films. We study how the French have written their literary history to create and reinforce a unique national identity through a close reading of the works of writers such as Villon, Labé, Molière, Voltaire, Hugo, Maupassant, Camus, and Duras. Units: 6.

Prerequisite: FREN 202 or consent of instructor

FREN 302
Cinematically Speaking
French films function as a springboard for readings, discussions, oral presentations, and short critical essays. We will briefly examine the history of French film from 1940 to the present, study cinematic techniques, the vocabulary of cinema, and explore the principal themes. Units: 6.

Also listed as Film Studies 302

Prerequisite: FREN 202 or consent of instructor

FREN 303
Introduction to Francophone Literary Studies
This course aims at introducing students to the nature and role of literature in the francophone world. Selected pieces from various literary genres (folk tales, poetry, drama, and novels) by writers such as Césaire, Senghor, Diop, Bâ, Jalloun, Kateb, and Memmi will be read. Themes will include colonialism, resistance, and identity formation. Units: 6. Prerequisite: FREN 202 or consent of instructor

FREN 304
Pleasures of the Text
This course's texts are chosen for their accessibility to advanced intermediate readers of French. Objectives include: increased fluency in reading, vocabulary building, mastery of idiomatic structures, and an exploration of what makes reading worthwhile as well as pleasurable. We sample medieval legends, love poetry, dramatic novellas, and short modern novels. Units: 6.

Prerequisite: FREN 202 or consent of instructor

FREN 325
Destination Dakar
A required course for students who plan to take French 400 that will serve as an introduction to Dakar. Students will be asked to participate in weekly meetings. Units: 2.

FRENCH AND FRANCOPHONE STUDIES

FREN 400
Senegalese Culture
This course is part of the Lawrence Francophone Seminar in which students study in French-speaking West Africa for ten weeks. Offered in alternate years. Units: 6.

Also listed as Anthropology 450

Prerequisite: Must be attending the LU Francophone Seminar

FREN 401
Senegalese Literature and History
This course is part of the Lawrence Francophone Seminar in which students study in French-speaking West Africa for ten weeks. Offered in alternate years. Units: 6.

Prerequisite: Must be attending the LU Francophone Seminar

FREN 402
French Language
This course is part of the Lawrence Francophone Seminar in which students study in French-speaking West Africa for ten weeks. Offered in alternate years. Units: 6.

Prerequisite: Must be attending the LU Francophone Seminar

FREN 403
Beginning Wolof
This course is part of the Lawrence Francophone Seminar in which students study in French-speaking West Africa for ten weeks. Offered in alternate years. Units: 3.

Prerequisite: Must be attending the LU Francophone Seminar

FREN 404
Senegalese Music
This course is part of the Lawrence Francophone Seminar in which students study in French-speaking West Africa for ten weeks. Units: 3.

Also listed as Music Repertoire-Perf Study 405

Prerequisite: Must be attending the LU Francophone Seminar

FREN 410
Romantics, Realists, and Rebels
Beginning with Rousseau's idealistic notions of nature, gender relationships, and social responsibility, this course examines the diverse ways in which Romantics, Realists, and Rebels reacted to the social, cultural, and political upheavals of the 19th century. Through the works of novelists, artists, poets, and musicians such as Chateaubriand, Delacroix, Chopin, Hugo, Balzac, Sand, Flaubert, Baudelaire, and Rimbaud (among others), we trace the wide range of responses characteristic of this turbulent period. Units: 6.

Prerequisite: At least one 300-level course in French or consent of instructor.

FRENCH AND FRANCOPHONE STUDIES

FREN 411
Fascism and Film
This course lets students examine films that were ostensibly made as entertainment or explicitly crafted as propaganda in the historical context of Nazi Germany and occupied France. Aside from learning how governments and their cinematic agents used this relatively new medium to shape public opinion (in support of the war, against Jews, etc.), students will see where and how resistance was possible. Units: 8.

Also listed as Film Studies 411

Prerequisite: One course in French at the 300 level or consent of instructor

FREN 420
Defining Frenchness
This course examines the French national self-image over the centuries, including the creation of a national historical narrative. We will also consider how defining the non-French, the foreigner, and especially the immigrant helps to reify national self-image. Units: 6.

Prerequisite: One 300-level French course or consent of instructor

FREN 440
Contemporary Issues in the French-Speaking World
This course is designed to give students insights into the realities of contemporary France and other parts of the French-speaking world (Belgium, Switzerland, Québec, Vietnam, francophone Africa, and the Islands of the Pacific and Indian Ocean) through the study and discussion of literature, essays, film, art, and recent newspaper and magazine excerpts, as well as radio and television broadcasts from the French media. Units: 6.

Prerequisite: One 300-level course or consent of instructor

FREN 445
Media and French Revolutions
In this course, we will think about how mediated representations shape our understanding of the world we live in by investigating the dynamic relationship between diverse forms of media (print, visual, and audio) and the French revolutions of the 19th century, as well as the Franco-Algerian War and the events of May 1968. Units: 6.

Prerequisite: One 300-level course or consent of instructor

FREN 460
Translation and Stylistics
This course provides students with the knowledge and basic skills involved in translating between English and French. It surveys various approaches to translation, grammatical problems involved, and linguistic and cultural differences. Literary, business, and diplomatic texts will be used. Units: 6.

Prerequisite: One 300-level course or consent of instructor

FRENCH AND FRANCOPHONE STUDIES

FREN 480
Travelers' Tales
This course will investigate the dynamic reciprocal relationship between travel, real or imagined, and the development of a discourse on the Other. Drawing on the works of Montaigne, Graffigny, Rimbaud, Baudelaire, Loti, Celine, Maran, Dadié, and Beyala, the course will explore the writers' fantasies in their attempt to acquaint us with the "exotic." Units: 6.

Prerequisite: One 300-level French course or consent of instructor

FREN 482
Monsters and Deviants
Every culture has its own definition of social deviance and monstrosity. We will study some of the favorite deviants of French fiction. Characters and authors may include a medieval werewolf, Quasimodo, the phantom of the opera, the Marquis de Sade, Hugo, Baudelaire, Rimbaud, Verlaine, Lautréamont, Genet, Foucault, and Labou Tansi. Units: 6.
Prerequisite: One 300-level French course or consent of instructor

FREN 501
Immigrant Voices
This course examines the myths and realities of immigrant life through the writings of Maghrebin and sub-Saharan African francophone writers (Beyala, Diome, Boukedenna, Mounsi, Begag, and Chaouite). The course will address questions of identity, assimilation, acculturation, integration, alienation, and marginalization and various survival strategies. Units: 6.

Prerequisite: One 400-level French course or consent of instructor

FREN 502
Childhood
This course focuses on the representation of the child in French and Francophone literature. We will examine the construction of childhood by looking at changing notions of innocence, ongoing debates about education, cultural narratives about becoming gendered, and individual narratives about assuming an identity. Units: 6.

Prerequisite: One 400-level French course or consent of instructor

FREN 503
Women Writing in French
Seeking to uncover lives that had remained largely hidden, women writing in French have revealed and shared their innermost desires and frustrations. French and francophone women writers have braved ostracism to question their identity and their relationship to family and society. Authors may include Duras, Djebar, Cixous, Bugul, Kristeva, Sebbar, Sand, Colette, and Hébert. Units: 6.

Also listed as Gender Studies 503

Prerequisite: One 400-level French course or consent of instructor

FRENCH AND FRANCOPHONE STUDIES

FREN 504
Je t'aime, moi non plus: Franco-American Love-Hate Stories
How did the national friendship forged during the “sister” American and French Revolutions devolve into the post-9/11 enmity-filled era of “freedom fries” and widespread French-bashing? In this course, we will examine a variety of each nation’s diverse mutual representations in order to better understand the dynamic and often volatile nature of Franco-American cultural relations. Units: 6.

Prerequisite: One 400-level course in French or consent of instructor

FREN 516
Romantics, Rebels, Realists
Beginning with Rousseau’s idealistic notions of nature, gender relationships, and social responsibility, this course will trace Romantically inspired dissatisfaction with the cultural status quo. We examine the range of responses characteristic of this intellectual moment: retreat into a Romantic idyll, open dissension, subversion, and realistic accommodation. Course explores readings in the context of art, music, and history. Units: 6.

Prerequisite: One 400-level French course or consent of instructor

FREN 555
Myths of Paris
In this course, we will examine some of the major literary, cultural, and intellectual movements that have shaped the character of French depictions of Paris from the 18 to the 21st centuries. Special focus will be placed on literary and visual representations of Paris and the construction of its myths. Units: 6.

Prerequisite: One 400-level course or consent of instructor

FREN 557
The Story of "I": Contemporary Life Writing in France
This course is based on close reading of a variety of life writing forms including coming-of-age narrative, testimonial, the reinvented self, and texts of self-healing. We focus on the ethics of narration (self-distortion, misrepresentation of others, etc.). Our study extends in some cases to cinematic self-representations. Units: 6.

FREN 559
Ancients Against Moderns
From 17th-century quarrels in the Acad’mie Française to the Culture Wars of the 1990s, we read (in)famous theorists to discover how paradigm shifts come about as the result of vociferous academic debates when they surface in the public sphere. Authors and theorists may include Perrault, Boileau, Derrida, Godard, Foucault, Barthes, Lyotard, Bourdeau. Units: 6.

Prerequisite: One 400-level French course or consent of instructor

FRENCH AND FRANCOPHONE STUDIES

FREN 568
France Under Nazi Occupation
This course looks at France and its people under Nazi occupation. It examines well-known films and literature produced under German and Vichy censorship and the risks those cultural products did or did not entail. It compares those literary and cinematic texts with more recent attempts to make sense of the difficult period. Units: 6.

Prerequisite: One 400 level French course or consent of instructor

FREN 588
Black Cultural Nationalisms
A study of the variations of black cultural nationalisms in the works of francophone writers from Africa and the Diaspora. This course examines the writers, challenge to the "Négritude" school and the ways in which they articulate plural and locational black identities to affirm their unique sense of national belonging. Readings from authors such as Senghor, Cé'saire, Laye, Condé', Chamoiseau, Contant, and Glissant. Units: 6.

Also listed as Ethnic Studies 584

Prerequisite: One 400-level French course or consent of instructor

FREN 600
Senior Seminar
Seniors meet with the instructor early in Term I to select a specific topic. They read and discuss texts at the beginning of the Winter Term, then formulate their own projects, which may take them in a direction of their choice (literature, art, history, music, etc.). Units: 6.

FREN 390, 590, 690
Tutorial Studies in French
Topic of study and the structure of the term's work depend on the interest of the student, the instructor, and the subject. Tutorials are not substitutes for courses but opportunities to pursue topics suggested by courses. Units: Variable.

Prerequisite: Counter Registration Required.

FREN 191, 391, 591, 691
Directed Study in French
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

FREN 195, 395, 595, 695
Internship in French
An opportunity for students to apply their French language skills in business, government, and the non-profit sector on the regional, national, and international level. Arranged in collaboration with and supervised by a member of the department. Includes readings, discussion, report, and/or portfolio. Advance consultation and application required. Repeatable for up to 6 units. Units: 2 OR 3.

FREN 399, 599, 699
Independent Study in French
A thorough investigation of a topic of a student's choice, carried out in consultation with an instructor. Students considering an honors project in their senior year should register for this course, for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

FRESHMAN STUDIES

Professor: Gottfried (Psychology, chair)

Freshman Studies has been the cornerstone of the Lawrence curriculum for over 60 years. Designed by Nathan Pusey, who left Lawrence for the presidency at Harvard, it was first taught in 1945 and is still best understood as an introduction to liberal learning.

Students take *Freshman Studies* in their first two terms on campus. Each section of the course includes about fifteen students, allowing for close relationships between students and teachers. Because each section uses the same reading list, *Freshman Studies* also helps students to join in the life of a larger intellectual community, one that now includes generations of Lawrentians.

In keeping with such goals, *Freshman Studies* is expansive and inclusive. Instead of endorsing a single point of view, the course embraces works from many different traditions. Every division of the curriculum is represented on the syllabus, and recent versions of the course have included works by Plato and Shakespeare, Bishop and Einstein, Borges, Zhuangzi, and Milgram.

Through their encounters with such works, students gain an appreciation of different approaches to knowledge. They also join each other in exploring a host of important questions: What is the best sort of life for human beings? Are there limits to human knowledge? How should we respond to injustice and suffering? In addition to raising these questions, *Freshman Studies* serves more immediate and practical goals. The course encourages lively discussion and introduces students to the conventions of academic writing. In the first term, for example, students learn that a paper must serve the needs of an intelligent, curious reader. They also learn that a good paper should be organized around a central claim or thesis and supported with evidence from the text.

In the second term, students build on these foundations, moving on to more complex forms of argument. Students may be asked to assess the interpretations of earlier scholars or to contrast the treatment of a crucial theme in two very different texts. Through their work in *Freshman Studies*, then, students begin to master the skills needed for success in more advanced courses.

FRESHMAN STUDIES

Courses

FRST 100
Freshman Studies I
Required of first-year students and selected transfer students. Through the study of works representing a variety of intellectual and cultural traditions, students develop fundamental skills: the ability to read closely, to speak and write clearly, to persuade a reader and express themselves. Regular class work is supplemented by lectures and performances by Lawrence faculty members or by visiting scholars or artists. Units: 6.

Prerequisite: Registration through Dean of Student Academic Services

FRST 101
Freshman Studies II
Required of first-year students and selected transfer students. A continuation of *Freshman Studies I,* this course is designed to help students refine their abilities as readers, writers, and thinkers. As in *Freshman Studies I,* instructors stress close reading, cogent discussion, and clear writing. Regular class sessions are again supplemented by lectures and performances by Lawrence faculty members or by visiting scholars or artists. Units: 6.

Prerequisite: Registration through Dean of Student Academic Services

Freshman Studies Works List 2010-11

Term 1
William Shakespeare, “The Tempest”
Plato, “The Republic”
Wassily Kandinsky, “Improvisation 28” and “Concerning the Spiritual in Art”
Natalie Zemon Davis, “The Return of Martin Guerre”
Akira Kurosawa, “Rashomon”

Term 2
Stanley Milgram, “Obedience to Authority”
Stephen Jay Gould, “Bully for Brontosaurus”
Igor Stravinsky, “The Rite of Spring”
Jorge Luis Borges, “Collected Fictions”
Zhuangzi, “Basic Writings”

GENDER STUDIES

Professors: Gottfried (Psychology), Hoft-March** (French and Francophone Studies, The Milwaukee-Downer College and College Endowment Association Professorship), Peterson (German), Sarnecki (French and Francophone Studies, emerita)
Associate professors: Daughtry* (Anthropology), Haines (Psychology), Hoffmann (English), Kern** (History), Pickett (Physics, chair), Rico (History), Wall (Biology)
Assistant professor: Jenike (Anthropology)
Visiting assistant professor: Guenther-Pal (German)
Lecturers: Boyd Kramer (Gender Studies), Wegehaupt (East Asian Studies)

* On leave Term(s) I, II, III; ** On leave Term(s) III

Gender is a fundamental aspect of personal and social identity and a biological, psychological, and cultural category of paramount importance for people everywhere. In addition, gender is often a criterion for social stratification and different political treatment, as well as a favored symbol for expressing values and beliefs. Gender studies offers students an opportunity for focused study of such varied issues, in both contemporary and past societies, as human reproduction, gender roles in the family and society, the psychology of identity, sexual orientation, and representations of women and men in literature, music, and art.

2010-2011 Course Catalog

Required for the major in gender studies

1. Two core courses (interdisciplinary in nature):
    - Gender Studies 100: *Introduction to Gender Studies*
    - Gender Studies 200: *Introduction to Feminist Theory and Practice*
2. Two additional cross-listed six-unit courses, cross-listed and offered within various disciplines that focus primarily on gender. These courses must be distributed as follows:
    - One must be either Gender Studies 110 or Gender Studies 350.
    - One must be either Gender Studies 180 or Gender Studies 270.
3. At least six additional six-unit courses in either gender studies or cross-listed, and some may be gender-component courses, as described below. The six courses must be distributed as follows:
    a. At least two courses must be at the level of 200 or above.
    b. At least one course must be at the level of 400 or above.
    c. Completion of independent study in gender studies can be substituted for one course.
    d. A *Senior Experience* of at least six units.

Courses cross-listed in gender studies will count toward completion of the major whether students register for them using the program's designation (GEST) or an individual department's designation.

GENDER STUDIES

Required for the minor in gender studies

1. Two core courses:
    - Gender Studies 100: *Introduction to Gender Studies*
    - Gender Studies 200: *Introduction to Feminist Theory and Practice*
2. Four additional six-unit courses that focus primarily on gender. The four courses must be distributed as follows:
    a. Three must be cross-listed in gender studies; the one remaining course may be a gender-component course. If these are gender-component course, students must complete a form (to be signed by the instructor and their gender studies advisor) that outlines which course requirements will be fulfilled with work applicable to gender studies. This form must be completed and submitted to the gender studies advisor by the end of the second week of the term. Forms may be downloaded from the gender studies Web page.
    b. At least two courses must be at the level of 200 or above.
    c. Completion of independent study in gender studies can be substituted for one course.

    C average in the minor

Courses cross-listed in gender studies will count toward completion of the minor whether students register for them using the program's designation (GEST) or an individual department's designation.

***Senior Experience* in Gender Studies**
Students majoring in Gender Studies will enroll in a Senior Experience that is approved by the Gender Studies Steering Board and mentored by a gender studies faculty member.

The *Senior Experience* will be at least one term, but may be more depending on the route the student pursues. The experience may be an independent study, an internship/practicum accompanied by an independent study, or an approved project in an advanced course. The *Senior Experience* will culminate in a senior thesis about the project, and an oral presentation of the student's work. A variety of artistic or research projects, interdisciplinary projects, and projects based on social service or activist initiatives may be appropriate Senior Experiences, but must be approved in consultation with the student's advisor and the Steering Board.

Students interested in pursuing an interdisciplinary capstone that integrates their interests in gender studies with another major or student teaching, are strongly encouraged to consult with their advisors and relevant department chairs to plan and negotiate their overall Senior Experience as early as possible.

GENDER STUDIES

Courses

GEST 100
Introduction to Gender Studies
What is gender? How is it constructed by the social world in which we live? How are our models of masculinity and femininity interwoven with models of race, sexuality, class, nationality, etc.? We will explore these questions theoretically and through interdisciplinary focal points - these may include "testosterone," "beauty," "domesticity," or other examples as chosen by the instructors. Units: 6.

GEST 110
Gender and Feminism in Historical Perspective
A comparative world history of both gender relations and the emergence of a feminist consciousness within the past 500 years. Case studies drawn from different regions of the world will precede the examination of the emergence of a global feminism in the late 20th and early 21st centuries. Topics will include the social roles of men and women, ideas about masculinity and femininity, understandings of sexual orientation, forms of systematic subordination, and the politics of modern feminisms. Units: 6. Also listed as History 140

GEST 180
The Biology of Human Reproduction
An introductory lecture course focusing on human reproduction to demonstrate some basic biological principles. The course includes discussion of cellular and organismal processes related to the development of human biological complexity. Current research in reproductive biology and its impact on the individual and society is considered. Lecture only. Primarily for non-science majors; credit not applicable to the biology major. Units: 6. Also listed as Biology 100

GEST 200
Introduction to Feminist Theory and Practice
Examines and critiques a variety of feminist theories and how they apply to people's lives today. We explore the tension between feminist theory and practice as we look at significant contributions to the field by women of color, gay and lesbian studies, queer studies, and the study of masculinities. Units: 6. Prerequisite: GEST 100

GEST 215
Women in Classical Antiquity
This course examines the roles of women in ancient Greek, Hellenistic, and Roman societies, using historical, literary, art historical, and archaeological sources. Topics will include these cultures' constructions of gender and the ways in which they affected the relationship of women (and men) to social, religious, political, economic, and legal institutions.

Topic for Winter 2011: Women in Classical Antiquity This course examines the roles of women in ancient Greek, Hellenistic, and Roman societies, using historical, literary, art historical, and archaeological sources. Topics will include these cultures' constructions of gender and the ways in which they affected the relationship of women (and men) to social, religious, political, economic, and legal institutions. Units: 6. Also listed as Art History 400, Classics 540

Prerequisite: One course in ancient art, one course in Classics, or consent of instructor.

GENDER STUDIES

GEST 220
Women in Early America, 1607-1860
An examination of the experiences of women in early America, focusing both on women's lives and on the changing economic, political, and cultural roles they played in American society. Themes include women and the family, women's religious experiences, women and industrialization, and the effects of slavery on black and white women. Units: 6. Also listed as History 335

Prerequisite: Sophomore standing or consent of instructor

GEST 250
Women's Literary History
An examination of how and why linear narratives of literary history have traditionally omitted or obscured women's contributions. Topics will include the stereotypical links drawn between print and sexual promiscuity, as well as other factors that have impacted the roles that women have played in literary history. Units: 6. Also listed as English 270

Prerequisite: ENG 150 or GEST 100

GEST 256
Transgender Lives
An introduction to the historical and literary representations of transgender people. Using a feminist lens, this course will examine issues such as identity, pathology, representations of the "other," and of course, cultural ideas about gender norms and appearance. Units: 6.

Prerequisite: GEST 100 or consent of instructor

GEST 270
The Psychology of Gender
An examination of theory and research on gender identity, gender roles, and gender similarities and differences. Topics include gender stereotypes, gender role development, sexual orientation, sex education, as well as gender variations in cognitive skills, aggression, mental and physical health, and family roles. Units: 6. Also listed as Psychology 310

Prerequisite: Sophomore standing

GEST 275
Lesbian, Gay, Bisexual, and Transgender (LGBT) Psychology
This course will examine the emerging psychological literature on the lives of lesbian, gay, bisexual, and transgendered (LGBT) persons. Specific topics will include: sexual/gender identity across the lifespan, "coming out" as a sexual/gender minority, transphobic and homophobic bigotry, transgender and same-sex relationships and parenting, and LGBT issues in late-life. Units: 6. Also listed as Psychology 275

GEST 280
Topics in Gender Studies
Explores a particular topic of current interest in gender studies, and may be cross-listed with other departments. Topics will vary with each offering of the course. Different iterations of the course may be taken for credit with the instructor's consent. Units: 6.

GENDER STUDIES

Topic for Fall 2010: Race and the Reproduction of Desire

This course examines the relationship between race and sexual and /or erotic desire as a category of racial and class stratification using post-colonial theory, urban sociological theory, cultural sociological theory, race, and feminist theory. We will examine the role of desire and notions of attractiveness in how women, especially of color, use their erotic capital to move up or down capitalist market structures like jobs, media, and desire industries. This course will focus on categories of race, desire, taste, and class status in the following social institutions: family, urban space, work, the sex industry, and cultural production.

GEST 300
Introduction to Queer Theory
Offers theoretical frameworks for grappling with social constructions of sexuality alongside those of gender, class, race, and other identity categories. This class, like the field itself, uses the term "queer" to designate not just people but also practices: it explores representational and interpretive strategies that highlight inconsistencies within our cultural models of sexuality, desire, and subjectivity. Units: 6.

Prerequisite: GEST 100, or another GEST class and consent of instructor

GEST 323
Reel Men: Masculinity in American Film, 1945-2000
Focusing on an array of well-known American films — "The Maltese Falcon," "Red River," "Dr. Strangelove," "McCabe and Mrs. Miller," "Chinatown," "Die Hard," and "American Beauty" among them — the course will integrate film theory, gender theory, and American history to address the problem of how masculinity has been constructed in American culture since World War II. Not open to students who have previously received, or need to receive, credit for HIST 400. Units: 6. Also listed as Film Studies 300, History 300

Prerequisite: Sophomore level or above

GEST 350
Women and Men in Cross-Cultural Perspective
An anthropological approach to the study of gender, the sexual division of labor, marriage, and reproduction. Critical examination of evolutionary, materialist, structuralist, and practice theory approaches to understanding gender behavior and gender stratification. Topics such as transgendered sexuality, reproductive technologies, the anthropology of infancy and parenting address the diversity of ways in which cultures construct sex difference, gender, and sexuality. Units: 6. Also listed as Anthropology 306

Prerequisite: ANTH 110 or GEST 100

GEST 351
Archaeology of Gender
An examination of the relationship between gender and material culture. Focus on how gender and gender roles are reflected in the archaeological record and on the problems in identifying and determining gender roles in prehistory. Readings include studies from both the Old and New Worlds and modern theoretical approaches. Units: 6. Also listed as Anthropology 320

Prerequisite: One anthropology course or consent of instructor

GENDER STUDIES

GEST 361
Vampires, Monsters, and Man-Eaters (In English)
This course seeks to reveal the ways in which the question of monstrous difference is articulated in a variety of German “texts.” Its main goal is to examine the ways that representations of monstrousness are employed to stage complex public and private anxieties as well as to provide an expression of rebellion against various systems of hierarchy. Featured in the works of canonized authors as well as within the realm of popular culture, the representational functions of the monster can provide valuable insight into numerous aspects of German history and psychosexual relations. Units: 6. Also listed as German 361, Film Studies 361

GEST 362
Vampires, Monsters, and Man-Eaters
This course seeks to reveal the ways in which the question of monstrous difference is articulated in a variety of German “texts.” Its main goal is to examine the ways that representations of monstrousness are employed to stage complex public and private anxieties as well as to provide an expression of rebellion against various systems of hierarchy. Featured in the works of canonized authors as well as within the realm of popular culture, the representational functions of the monster can provide valuable insight into numerous aspects of German history and psychosexual relations. Units: 6. Also listed as German 362, Film Studies 362

Prerequisite: GER 312

GEST 410
Gender, Politics, and Current Events in Latin America
A critical analysis of current events in Latin America with a focus on gender and political issues. Through films, magazine articles, fiction, and selected radio and television broadcasts from Latin America, students will study major events that relate and give expression to the cultural mores of Latin Americans within the realm of gender and politics. The course allows students to continue to develop their oral communication skills in the target language and, with a wide range of topics and interests, to work toward an understanding of gender issues and political events that have shaped and transformed Latin America. Units: 6. Also listed as Spanish 410

Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor

GEST 412
Gender, Politics, and Current Events in Spain
A critical analysis of current events in Spain with a focus on the politics of gender, class, and race. Through selected films, magazine articles, fiction, and media broadcasts from Spain, students will study major problems that affect Spanish society today. The course allows students to continue to develop their oral communication skills in the target language and, with a wide range of topics and interests, to work toward an understanding of issues and political events that affect present-day Spain in the wider context of the European Union. Units: 6. Also listed as Spanish 415

Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor.

GENDER STUDIES

GEST 415
Society and the Sexes in Pre-Industrial Europe
A seminar, organized topically, exploring changing gender definitions, economic and social roles, family structures and functions, and styles of intimacy from 1000 to 1800. A variety of primary sources and scholarly interpretations examined. Units: 6. Also listed as History 430

Prerequisite: Junior standing or consent of instructor

GEST 421
Music and Gender
This course will explore the relationship between music and gender in the Western world from the Middle Ages to the present. Considering classical and popular music, including music videos and film, as well as writings about gender and music, we will explore music's role as a reflection of, reaction to, and active participant in gender construction. Units: 6. Also listed as Music History 421

Prerequisite: MUHI 201 and MUHI 202

GEST 423
Reel Men: Masculinity in American Film, 1945-2000
At the upper level, the course will serve as a history seminar in preparation for the history department's capstone course. Those taking it at that level will be required to write at least one paper addressing film or gender theory and to write a 10-15 page research prospectus. Not open to students who have previously received credit for HIST 300. Units: 6. Also listed as History 400, Film Studies 400

Prerequisite: Junior standing or above

GEST 445
Gender and Modernist British/American Literature
A study of the construction of gender in early 20th-century fiction and poetry. Authors include Cather, Woolf, Lawrence, Hemingway, Sassoon, and others. Units: 6. Also listed as English 515

Prerequisite: Junior standing, an intermediate course in English or gender studies, or consent of instructor

GEST 476
Nineteenth Century American Women Writers and the Literary Marketplace
Focusing primarily on the nineteenth century, this course will consider how American women writers position themselves in relation to the literary marketplace. Readings by writers such as Sedgwick, Child, Fern, Stowe, Howe, Dickinson, Harper Piatt and others. Units: 6. Also listed as English 476

Prerequisite: Junior standing, an intermediate course in English, or consent of instructor.

GEST 490
Topic: Cross-Cultural Perspectives in Music and Gender
An examination of a particular topic in ethnomusicology. Topics and prerequisites may vary from course to course. Units: 6. Prerequisite: Sophomore standing or consent of instructor

GENDER STUDIES

GEST 500
Advanced Topics in Gender Studies
An examination of a particular topic of current interest in gender studies or feminist theory; may be cross-listed with other departments and programs. Topics in this series will vary each time the course is offered. Different iterations of the course may be taken for credit with the instructor's permission. Units: 6.

Prerequisite: Junior standing and gender studies at the 200-level or above, or consent of instructor; individual versions of the course may carry other prerequisites

GEST 503
Women Writing in French
Seeking to uncover lives that had remained largely hidden, women writing in French have revealed and shared their innermost desires and frustrations. French and francophone women writers have braved ostracism to question their identity and their relationship to family and society. Authors may include Duras, Djebar, Cixous, Bugul, Kristeva, Sebbar, Sand, Colette, and Hébert. Units: 6. Also listed as French 503

Prerequisite: One 400-level French course or consent of instructor

GEST 526
Feminist Literary Theory
This course will examine the historical origins, practical work, and contemporary methodologies of feminist literary theory. We will address why we need feminist literary theory; how it has met (or not) the complexities raised by recent issues in gender, sexuality, and women's studies; and whether or not feminist literary theory can accommodate the nonlinearity, inclusiveness, and flexibility that it demands. Units: 6. Also listed as English 526

Prerequisite: Junior standing, two or more courses in gender studies or consent of instructor.

GEST 549
Women’s Writings
A course on women’s writing from different times and Spanish-speaking cultures. Content varies according to the instructor’s choices. It will emphasize theoretical approaches to women’s writings and closely read relevant authors. Taught in Spanish. Units: 6. Also listed as Spanish 546

Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

GEST 560
Topics in Gender and Social Development
This seminar examines social development in childhood and adolescence. A variety of issues will be explored including achievement motivation, attachment, and aggression. Special emphasis will be given to the topics of gender identity, gender roles, sex education, and sexual orientation. Units: 6.

Prerequisite: PSYC 260 or 265, MATH 117, or consent of instructor

GENDER STUDIES

GEST 390, 590, 690
Tutorial Studies in Gender Studies
Advanced study, arranged and carried out under the direction of an advisor. Units: Variable. Prerequisite: Counter Registration Required.

GEST 191, 391, 591, 691
Directed Study in Gender Studies
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable. Prerequisite: Counter Registration Required.

GEST 195, 395, 595, 695
Internship in Gender Studies
Internships may be obtained in a wide variety of field settings: agencies or organizations focused on education, health care, economics, violence, legal or counseling services, or other arenas in which gender plays a formative role. For example, students might work with a Gay-Straight Alliance or at Planned Parenthood. Students will integrate a scholarly component into their internship with the help of their faculty and on-site supervisor. Students' Internships may be done during the academic year (at a local placement or on campus) or during the summer. Units: Variable.

GEST 399, 599, 699
Independent Study in Gender Studies
Advanced study, arranged in consultation with an advisor. Students considering an honors project should register for this course for one or more terms. Units: Variable. Prerequisite: Counter Registration Required.

Gender-component courses

Instructors have agreed that students can focus individual work on gender, or a focus on gender is a regular part of these courses.

ANTH 308: *Emotion, Identity, and Culture*
ANTH 330: *Language and Culture*
ANTH 342: *Medical Anthropology*
ANTH 354: *Ethnography of East Asia*
ANTH 366: *Ethnography of Japan*
ARHI 200: *Archaic and Classical Greek Art*
ARHI 202: *From Alexander to Kleopatra: Art of the Hellenistic Age*
ARHI 204: *Roman Art*
ARHI 220: *Art of the Italian Renaissance*
ARHI 550: *Seminar: Portraiture*
BIOL 103: *Biotechnology and Society*
BIOL 237: *General Endocrinology*
EAST 140 (HIST 160): *Traditional East Asian Civilization*
EAST 150 (HIST 165): *Modern East Asian Civilization*
EAST 260: *East Asian Classics in Translation*
EAST 350: *Modern Chinese Literature and Cinema in Translation*

GENDER STUDIES

EDST 350: *Ethnicity, Cultural Diversity, and Education*
ENG 260: *Survey of African American Literature*
ENG 460: *The Victorian Age*
ENG 465: *The English Novel*
ENG 500: *Contemporary American Fiction*
ENG 507: *Contemporary British and Postcolonial Fiction*
ENG 510: *Literature of the Harlem Renaissance*
ENG 525: *Contemporary Critical Theory*
FREN 502: *Childhood**
GOVT 340: *International Politics*
HIST 205: *Cross-Cultural Contacts in the Early Modern World*
HIST 260: *Culture and Power in Renaissance Europe*
HIST 261: *Rebellion and Discipline in Reformation Europe*
HIST 280: *Religion, Magic, and Witchcraft in Early Modern Europe*
HIST 290: *Modern European Thought I*
HIST 291: *Modern European Thought II*
HIST 330: *History of the American West*
HIST 470: *The American Civil War*
HIST 475: *America at Play*
HIST 479: *Travel and Tourism in American History*
HIST 480: *Reconsidering the 1960s*
MURP 452: *Literature of the Piano*
PSYC 260 or 265: *Developmental Psychology*
PSYC 270: *Social Psychology*
PSYC 460: *Adolescent Psychology* PSYC 480: *Historical Origins and Contemporary Viewpoints of Psychology*
PSYC 560: *Topics in Social Development*
RLST 240: *Islam*
RLST 280: *Quran*
SPAN 520: *Survey of Latin American Literature I***
SPAN 521: *Survey of Latin American Literature II***
THAR 327: *Playscript Analysis*

* Taught in French
** Taught in Spanish

GEOLOGY

Professors: Bjørnerud (Schober Professorship in Environmental Studies, chair term III
Associate professors: Clark, Knudsen* (chair terms I and II)

* On leave Term(s) III

If “geology” makes you think of dusty collections of rocks, minerals, and old bones, visit the Lawrence geology department. You will discover a thriving group of faculty members and students who consider geology to be a way of seeing the Earth, a lens through which the planet’s past and present come simultaneously into focus.

Lawrence geology students have an exceptional range of research experiences, comparable to what students from larger universities would first encounter at graduate school. In a single academic term, you could find yourself sampling ice-age lake sediments with the department’s portable drill rig, mapping the roots of an ancient mountain belt in Michigan’s upper peninsula, instrumenting a watershed in eastern Wisconsin, examining microscopic rock structures with image-analysis software, and conducting geochemical and crystallographic studies with research equipment shared with the chemistry and physics departments. All geology majors complete a research project as part of their Senior Experience, and many present results of their research at professional meetings.

Field-based studies are at the heart of the Lawrence geology program. Recent destinations for the annual all-department field trip have included Hawaii, the Adirondacks, Wyoming, Ontario, Scotland, and Puerto Rico. Shorter trips are integrated into academic-year courses, and there also are opportunities for summer field courses, internships, and research projects. Appleton is within a few hours’ drive of classical geological localities, including iron ore deposits and ancient volcanoes in northern Wisconsin and Michigan, a fossil forest preserved in glacial sediments on the shores of Lake Michigan, and the world-renowned glacial landscape of the Kettle Moraine. Local environmental issues related to surface and groundwater protection also provide the basis for student field projects.

In many ways, geology is the ideal liberal arts degree. It is a discipline that draws not only upon one’s observational and analytical abilities but also upon one’s aesthetic and creative instincts.

GEOLOGY

2010-2011 Course Catalog

Required for the geology major

1. Required core courses
    - Geology 110: *Introductory Geology*
    - Geology 210: *History of Earth and Life*
    - Geology 240: *Chemistry of the Earth: Low-Temperature Environments*
    - Geology 245: *Mineralogical Analysis*
    - Geology 250: *Chemistry of the Earth: High-Temperature Environments*
    - Geology 360: *Physics of the Earth: Surface Processes*
    - Geology 370: *Physics of the Earth: Subsurface Processes*
    - Geology 580: *Junior Seminar*
    - Geology 620: *Senior Capstone*
2. Additional courses in geology
   Two additional six-unit courses in geology, including two courses numbered 200 or higher
3. Courses in other sciences and mathematics
    - Chemistry 116 (may be waived by placement exam)
    - Mathematics 107 or 117 or 120 or 140 or 207
    - Physics 141 or 151

Required for the geology minor

1. Required core courses
    - Geology 110: *Introductory Geology*
    - Geology 210: *History of Earth and Life*
    - Any two of the following:
        - Geology 240: *Chemistry of the Earth: Low-Temperature Environments*
        - Geology 250: *Chemistry of the Earth: High-Temperature Environments*
        - Geology 360: *Physics of the Earth: Surface Processes*
        - Geology 370: *Physics of the Earth: Subsurface Processes*
2. Additional courses in geology
   Two additional six-unit courses in geology numbered 200 or higher
3. C average in the minor

GEOLOGY

Required for the interdisciplinary major in the natural sciences in geology and a secondary discipline

1. Geology 110 and Geology 210
2. Physics 150 and 160 or, with the permission of the secondary department, Physics 120 and 130.
3. Either:
    a. Biology 110 and 120 or Biology 110 and 140, or
    b. Chemistry 115 and 116 or equivalent chosen to include the secondary interest
4. At least 10 six-unit courses in the sciences (biology, chemistry, geology, and physics) numbered 200 or above, with at least five in geology and at least three in the secondary discipline
5. Geology 580 and 620

Broad Field Science
Students who complete a major, a minimum of two courses in each of two other science disciplines, and at least one course in each of the remaining three disciplines (including space science) will be eligible for Broad Field certification.

Please refer to the Department of Education for more detailed information on teacher certification.

***Senior Experience* in Geology**
The *Senior Experience* in Geology comprises two 3-unit courses (GEOL 580 and 620), the first taken in spring term of the junior year and the second in fall term of the senior year.

The junior seminar helps students begin to acquire an “insider's view” of the geosciences. In the first part of the course, students explore the philosophical and historical underpinnings of the discipline and develop strategies for finding and reading technical literature. Then, working with at least one member of the geology faculty, each student identifies a substantive research question and designs a plan by which to investigate that question.

In the senior capstone, students work with faculty mentors to carry out these research plans (sometimes building upon work that they conducted during summer study on campus, in the field, or through programs at other universities). By the end of the term, each student presents his or her research results and analyses to the department as a whole. Some students opt to continue their capstone research throughout their senior year as senior thesis or honors thesis projects.

GEOLOGY

Courses

GEOL 110
Introductory Geology
An introduction to the study of the Earth, examining the interdependent global systems (atmosphere, hydrosphere, biosphere, tectosphere) that set Earth apart from its planetary neighbors. Emphasis is also placed on human participation in and perturbation of these systems. One lab per week. This course may not be taken on a Satisfactory/Unsatisfactory basis. Units: 6.

GEOL 150
Environmental Science
Presents principles of biology, chemistry, and geology that relate to such environmental issues as resource limitation, pollution, and environmental degradation. Designed to foster understanding of scientific measures of environmental quality. One laboratory per week. Units: 6.

Also listed as Environmental Studies 150

Prerequisite: Freshman or sophomore standing; consent of instructor required for juniors and seniors

GEOL 160
The Ice Ages
This course focuses on the dynamic environment of the ice age periods in Earth history. Emphasis on the historical discovery of the ice ages, their possible causes, and their global effects on ecosystems on land and in the sea. One-day field trip to local glacial deposits. Units: 6.

Also listed as Environmental Studies 160

GEOL 210
History of the Earth and Life
A study of the physical, chemical, and organic evolution of the Earth since its origin 4.5 billion years ago, with emphasis on times of change and crisis. The course also examines the evolution of ideas about Earth's history, illustrating how science and culture are inherently entangled. Units: 6.

Also listed as Environmental Studies 230

Prerequisite: GEOL 110

GEOL 213
Geology and Health
A course investigating the links between geology and health, considering topics such as asbestos, natural and anthropogenic water contamination, and cycling of trace elements as both contaminants and necessary nutrients. Designed to illuminate the link between the seemingly disparate fields of geology and the health of life on earth. Units: 6.

Also listed as Environmental Studies 202 Prerequisite: GEOL 110

GEOLOGY

GEOL 214
Weather, Climate, and Climate Change
A study of basic meteorologic principles and climate patterns. These phenomena will be discussed in relation to evidence of past climate change and implications of global warming on future climate. Units: 6.

Also listed as Environmental Studies 235

Prerequisite: GEOL 110 or 150

GEOL 215
Origins: Solar System, Earth, Life
This course explores questions of deep origins — of the Solar System, Earth, and Life — and how these can be addressed through the methods of physics, geology, and biology. Topics considered include stellar evolution, planetary formation, the origin of the Moon, the differentiation of the Earth, and geological and biological constraints on the nature of the earliest life forms. Units: 6.

Also listed as Physics 212, Biology 212

Prerequisite: Introductory course in any two different natural sciences; at least one intermediate course in a natural science; and at least sophomore standing.

GEOL 220
Environmental Remote Sensing and GIS Applications
Fundamentals of electromagnetic radiation and the interaction of radiation with matter are introduced as the basis of remote sensing. Interpretation and manipulation of remotely sensed images are used to demonstrate the wealth of information remote sensing provides. Applications and case studies from geology, environmental science, ecology, agronomy, and urban planning will be explored. High school physics recommended. Units: 6.

Also listed as Environmental Studies 237

Prerequisite: GEOL 110; high school physics recommended

GEOL 240
Chemistry of the Earth: Low-Temperature Environments
An introduction to the geochemical processes at the Earth's surface. Emphasis is placed on how chemical processes such as thermodynamics, phase equilibria, and oxidation-reduction reactions shape the Earth surface and near-surface environments. Units: 6.

Also listed as Environmental Studies 240

Prerequisite: GEOL 110 and CHEM 115

GEOLOGY

GEOL 245
Mineralogical Analysis
This course serves as an introduction to mineralogical analyses. Students will utilize a variety of analytical techniques including Polarized Light Microscopy, X-ray diffraction, and Scanning Electron Microscopy to study crystallography and mineral chemistry. Students will use these tools to analyze a variety of geological samples including rocks, soils, and sediments. Intended to be taken simultaneously with GEOL 240. Units: 3.

Prerequisite: GEOL 240

GEOL 250
Chemistry of the Earth: High-Temperature Environments
Introduction to the chemical processes that form igneous and metamorphic rocks, with emphasis on how mineralogical, chemical, and isotopic clues can be used to gather information about Earth's early history and its inaccessible interior. One lab per week. Units: 6.

Prerequisite: GEOL 110 and CHEM 116; GEOL 240 and GEOL 245

GEOL 260
Introduction to Paleobiology
An organismal and systems approach to the study of the marine and terrestrial fossil record. The course will focus on diversification and extinction of biotas in the context of the environmental history of Earth. Weekly laboratory and one weekend field trip to Bjørklunden. Units: 6.

Prerequisite: GEOL 110 or BIOL 110

GEOL 320
Principles of Paleontology
A reading course on topics in current and classic paleontological research. Evolutionary trends and their recognition in the fossil record, morphological convergence, and paleoecology. One meeting per week. Units: 3.

Prerequisite: GEOL 260 (strongly recommended) or GEOL 210 or BIOL 235 or consent of instructor

GEOL 340
Advanced Geochemistry
A more detailed investigation of geochemical principles and processes through the investigation of important geochemical issues. Readings come heavily from the primary literature. Units: 6.

Also listed as Environmental Studies 330

Prerequisite: GEOL 240 and CHEM 115, or consent of instructor; CHEM 116 recommended

GEOLOGY

GEOL 350
Islands and Isolation
This course examines islands and the situation of isolation across the fields of geology, evolutionary biology, and human geography. Topics include island formation, dynamics of isolated natural and human populations, and the historical importance of islands in the study of natural history. The course includes laboratories and field trips. Units: 6.

Also listed as Biology 350, Environmental Studies 350

Prerequisite: Any of the following: ANTH 120, ANTH 140, BIOL 210, BIOL 235, BIOL 245, GEOL 210, GEOL 260 or consent of instructor

GEOL 360
Physics of the Earth: Surface Environments
This course studies the movement of water, solute, and sediment through the landscape and the resulting properties and distribution of surficial earth materials and landforms. Topics include weathering; soil development; runoff; mass movement; river, glacial, and coastal processes; and deposition in sedimentary environments. One lab per week. Units: 6.

Also listed as Environmental Studies 335

Prerequisite: GEOL 110 and 240 or consent of instructor; PHYS 141 or 151 recommended

GEOL 370
Physics of the Earth: Sub-Surface Processes
Introduction to the study of the mechanics of Earth's crust and mantle, including mountain-building processes, seismicity and faulting, mantle convection, interpretation of deformed rocks. Four-day field trip late in term. One lab per week. Units: 6.

Prerequisite: GEOL 240 or consent of instructor

GEOL 425
Prehistoric Human-Environment Interactions
This course focuses on the interrelationships between prehistoric humans and their environment on a variety of temporal and geographic scales. Topics include the detection and analysis of prehistoric environmental degradation, the possible impacts of natural and anthropogenically induced environmental change on prehistoric humans, and the modern significance of such interrelationships. Units: 6.

Also listed as Environmental Studies 425

Prerequisite: GEOL 110 or GEOL 150 or ENST 150 or ANTH 120

GEOLOGY

GEOL 426
Biogeography
Students will learn about past and present geographic distribution of plants, animals, and other organisms throughout the history of the earth and how these patterns can be reconstructed. An in-depth understanding of the basic controls on species distributions is vital to predicting future impacts of global climate change on ecological systems and is a key aspect of effective conservation efforts. Units: 6.

Also listed as Environmental Studies 426

Prerequisite: One of GEOL 110, ENST 150, BIOL 110, BIOL 120; or consent of instructor

GEOL 427
Paleolimnology
Students will learn about the study of lake systems through time. This includes lake formation, changes in watershed vegetation, water chemistry, hydrology, and disturbance regimes. The course will consist of a mixture of lectures, field trips, and labs. Students should be prepared to go on field trips to local lakes where we will recover sediment cores for analysis during the term. One lab per week. Units: 6.

Also listed as Environmental Studies 427

Prerequisite: GEOL 110 or ENST 150 or consent of instructor

GEOL 430
Watershed Hydrology
An introduction to the basic components of the hydrologic cycle, focusing on surface water and groundwater systems. Measurement and analysis of hydrologic data are emphasized. Application to contemporary issues such as flooding, watershed development, and groundwater contamination will be discussed. Units: 6.

Also listed as Environmental Studies 430

Prerequisite: GEOL 110; PHYS 141 or 151 recommended

GEOL 520
Seminar in Selected Topics in Geology
An opportunity for students to read and analyze primary literature on significant topics in geology. Units: 3.

Prerequisite: Declared geology majors only

GEOLOGY

GEOL 550
Seminar in Field Geology
During spring break, winter break, or prior to Term I, students conduct field investigations at an area of geological complexity, such as the Grand Canyon, Death Valley, Wyoming, Hawaii, the Florida Keys, southern Colorado, or Puerto Rico. May be repeated for credit.

Seminar for Fall 2010: Top: Lake Superior Geology
An exploration of the Precambrian geologic history of the Lake Superior region, including the major tectonic events that built the North American continent. Includes a week-long field trip prior to the start of fall classes and subsequent preparation of a research paper on a topic related to one or more of the field sites visited. Units: 3.

Prerequisite: GEOL 110 and consent of instructor

GEOL 580
Junior Seminar in Geology
The goal of the Junior Seminar is to engage geology majors in the scientific process. The course begins with consideration of the history of geology as a discipline. We discuss modes of thinking that are shared with other scientific disciplines as well as those unique to the geosciences, and we read seminal papers that shaped the development of the field. With the guidance of a faculty member, each student identifies a topic to investigate in depth. Students lead discussions, prepare literature reviews and give final presentations on their topics. The topic a student explores in the junior seminar may be (but is not required to be) the same as the one studied intensively in the Senior Capstone course (GEOL 620). For some students, the junior seminar topic may also be linked to a research project to be continued over the summer and/or through the student's senior year as an independent study or honors project. Units: 3.

Prerequisite: Declared geology major or minor and junior standing, or consent of instructor.

GEOL 620
Senior Capstone in Geology
The goal of this course is to assist geology majors in becoming scientific practitioners. The course places emphasis on framing testable hypotheses, collecting and analyzing meaningful datasets, and developing models of geologic phenomena. Each student applies these skills to a particular project or problem in the earth sciences. Units: 3.

Prerequisite: GEOL 580, declared geology major or minor and senior standing, or consent of instructor.

GEOL 390, 590, 690
Tutorial Studies in Geology
Advanced work, arranged and carried out in consultation with an instructor. Units: Variable.

Prerequisite: Counter Registration Required.

GEOLOGY

GEOL 191, 391, 591, 691
Directed Study in Geology
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

GEOL 195, 395, 595, 695
Internship in Geology
An opportunity for students to gain work experience in industry, government, or the non-profit sector. The academic component, supervised by a Lawrence instructor, includes readings, discussion with the instructor, and a formal presentation and written report, which can be used to satisfy the geology department's senior seminar requirement. (Grades are based on this academic work.) Intended to be used for research that is later developed into an honors project. Applications for an internship must be submitted by the fifth week of the term preceding the proposed internship. Units: Variable.

Prerequisite: Counter Registration Required.

GEOL 399, 599, 699
Independent Study in Geology
Advanced research, arranged in consultation with the department. Students considering an honors project should register for this course, for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

GERMAN

Professors: Friedlander, Peterson (chair), Ternes
Associate professor: Lanouette
Visiting assistant professors: Johnson, Guenther-Pal

German has long been a key language of culture, the arts, philosophy, and the social and natural sciences. For better and for worse, Germany has played a significant role in European and world history, while united Germany is one of the driving forces behind European integration and economic development. As a result, German is an important language — not just in Germany, Austria, Liechtenstein, and the German-speaking cantons of Switzerland — but also as a second language throughout the continent. Germany itself is changing in ways that shatter old prejudices and make German an exciting culture to explore.

More than six million Germans emigrated to the United States during the nineteenth and twentieth centuries, and millions of Americas share this heritage. For many students German is more than an exciting other culture: German is also a means of finding out where they came from and who they are.

The German Department at Lawrence University assists students in learning the German language, becoming familiar with Germany's literature, history, and culture, including popular culture — film, television and popular literature — in a developing European society that is far less homogeneous than students expect. German courses also encourage students to develop analytical and interpretive skills. This mix of information and skills helps them understand an increasingly dynamic, diverse and interdependent international community. The knowledge and abilities that German students acquire can help them in a wide variety of careers and give them a lifetime of cultural pleasure.

The study of German begins with the language, but the Lawrence German program insists that language is always part of a cultural nexus. Lawrence's German program is designed to help students develop proficiency in all four language skills: listening, speaking, reading, and writing. Since it only makes sense to learn German in courses with significant cultural content, beginning and intermediate instruction always contains both pertinent cultural material and the opportunity for comparisons between German and American experiences. Most classes, even at the elementary level, are conducted in German, and the program insists that every course, at all levels, is both a language and cultural course. Knowledge of a second language in its cultural context makes students aware of their own language and culture; they are less likely to take things for granted. Of course, the best way to experience difference is to live in another culture, and the German department strongly encourages students to take advantage of opportunities for study in the German-speaking world through our affiliated programs in Berlin, Freiburg, and Vienna. On campus they can maintain a connection to things German through the department's lunch and dinner tables and the Kaffeestunde, which are all facilitated by our Language Assistants.

Once the cultural and linguistic foundations have been laid, students embark on an exploration of German culture, history, and society. The German Department at Lawrence embraces the notion of German studies. Although works of great literature offer unparalleled access to German culture, students will also be exposed to a wider variety of cultural artifacts — film, television, nonfiction texts, popular narratives, etc. — than might be the case in more traditional German programs.

GERMAN

2010-2011 Course Catalog

Required for the German major

1. Sixty units beyond German 202, including German 285 and 312. At least half of these units must be taken at Lawrence, and 24 units should be at the 400 level or above. Only 12 units taught in English may count toward the major, but tutorials taken in conjunction with English courses may count as German credit.
2. Students usually complete a capstone project in the senior seminar or in conjunction with a departmental course taken during the senior year.
3. Students who expect to graduate will present a portfolio by the second week of their final term. The portfolio will be reviewed and approved or returned to the student for revisions before the end of the term. The student's advisor and one other member of the department will review a portfolio consisting of the following materials submitted as hard copy and on disk:
    - a brief statement in which students evaluate their development as German majors
    - a list of courses taken for the major
    - three sample pages of *Lesejournale* from all German courses numbered 300 and above taken at Lawrence
    - four papers from upper-level courses, two of which may be from courses taken abroad
    - a copy of the capstone paper

Required for the German minor
Thirty-six units beyond German 202, including German 285 and 312. At least half of these units must be taken at Lawrence, and 12 units should be at the 400 level or above. Only six units taught in English may count toward the minor, but tutorials taken in conjunction with English courses may count as German credits.
A C average in the minor is also required.

Teaching Certification in German
Teaching certification in German The German department offers a course of study that prepares its majors to teach German at the elementary and secondary levels. Students interested in teaching German, K-12, should plan to complete the major and should consult with the education department, about certification requirements.

***Senior Experience* in German**
The German Department's revised *Senior Experience* consists of a senior seminar (winter term) in which students first read a set of texts centered on a theme that they and the instructor have determined in advance. By the midpoint of the term, students will have developed individual paper topics that they will develop during the remainder of the term. The capstone project may be completed during winter term, or it may spill over into an independent study during spring term.

In either case, the senior seminar allows students to help each other develop their ideas and arguments; they will also present their findings to the entire seminar. Although these papers all touch on a common theme, the individual focus may emphasize literature, history, music, art, etc.

GERMAN

Students who are pursuing a double major or teaching certification should work with all concerned departments to assess the feasibility of an interdisciplinary capstone.

Courses

GER 101
German 1
The first course of a two-term sequence that introduces students to the basics of German. The traditional four skills of speaking, writing, reading, and listening are practiced, yet the prime concern is adequate comprehension and response within a given situation. Units: 6.

GER 102
German 2
A continuation of German 101. Students improve their communicative skills with continued practice in the four skills of speaking, writing, reading, and listening while learning about the culture of German-speaking countries. Units: 6.

Prerequisite: GER 101 or the equivalent

GER 177
Introduction to German Film (in English)
With its pivotal role in the inauguration of the cinema, knowledge of German film is critical to an understanding of the history of film. Considered as one of the most accessible aesthetic forms, the moving image pervades our everyday lives, and yet we seldom think of what we do as "reading" films. Throughout this course, students will be introduced to the practice of reading German films using three structuring lenses: 1) film and cultural history, 2) formal and generic elements, and 3) film criticism. Units: 6.

Also listed as Film Studies 177

GER 201
Intermediate German I
Further development of the four basic skills with an emphasis on increasing the student's ability to understand literary as well as non-literary texts of increasing difficulty. Successful completion of German 201 satisfies Lawrence's foreign language requirement. Units: 6.

Prerequisite: GER 102 or the equivalent

GER 202
Intermediate German II
Special emphasis on building reading and writing skills and expanding vocabulary. Cultural units include "Die Schwarzwaldklinik," a German TV series that develops listening comprehension and raises issues for student essays. Units: 6.

Prerequisite: GER 201 or the equivalent

GERMAN

GER 275
The Culture of Music in Germany
After considering the role of music in the construction of “Germanness,” the course focuses on the evolution of the “Lied” from folk song to the artistic “Lieder” and on contemporary popular music. Songs from the 18th to the 20th century are treated primarily as texts and cultural artifacts. Course will count toward the humanities general education requirement for B.A. and B.A./B.Mus students. Units: 6.

Also listed as Music History 150

Prerequisite: GER 202 or consent of the instructor

GER 276
Grim(m) Stories? Comparative Fairy Tales in Translation
The course focuses on tales collected by the Brothers Grimm, but it will also include other “national” collections (Perrault, Basile, Afanas’ev). Students will be introduced to various interpretative approaches (formalistic, structural, psychological, Marxist) that will enable them to analyze types, themes, and motives across cultures. Taught in English, but with the opportunity for students proficient in German or French to read in those languages. Course will count toward the humanities general education requirement for B.A. and B.A./B.Mus students. Units: 6.

GER 277
Introduction to German Film Studies
With its pivotal role in the inauguration of the cinema, knowledge of German film is critical to any understanding of the history of film. This course is intended to be an introduction both to German cinema and to the discipline of film studies. Considered perhaps as one of the most accessible aesthetic forms, the moving image pervades our everyday lives and yet we seldom think of what we do in the movie theatre as “reading.” Throughout this course, students will be introduced to the practice of reading the filmic text using three structuring lenses: 1) history, 2) formal and generic elements, and 3) film criticism. Units: 6.

Also listed as Film Studies 277

Prerequisite: GER 202 or consent of instructor

GER 285
Advanced Composition and Conversation
Students improve and refine writing and speaking skills through study of a variety of written texts, discussion based on readings, grammar exercises, and systematic vocabulary building. The primary work in the course involves composing (in multiple drafts) texts that fall into diverse categories, including descriptive, argumentative, and persuasive essays. Units: 6.

Prerequisite: GER 202 or consent of instructor

GERMAN

GER 288
German Theatre Workshop
Intensive study of German dramatic literature culminating in a public workshop performance. Students will investigate the background of the author and period of the plays, as well as doing dramatic readings. Assignments will include short essays and oral presentations. Course will count toward the humanities general education requirement for B.A. and B.A./B.Mus students. Units: 6.

Prerequisite: GER 202 or consent of instructor

GER 290
Berlin: Experiencing a Great City
This course introduces students to one of the world's great cities. Class work includes the history, culture, and literature of Berlin as well as preparations for a series of day-long walking tours of the city that students will conduct themselves for their classmates with the help of a guidebook. In addition, students will conduct comparative research on some aspect of life in the U.S. or Germany. Students must complete both the classroom portion of the course and the Berlin trip to receive credit. Course will count toward the humanities general education requirement for B.A. and B.A./B.Mus students. Units: 2 OR 4.

Prerequisite: GER 201 or higher

GER 312
Reading Texts and Contexts
This course serves as a transition from the language sequence to advanced courses in German literature and culture. Texts vary from novels to non-fiction, from drama to poetry, and from written forms to film. While familiarizing students with both literary and cultural analysis, the course stresses literature's place in fostering an understanding of German society. Units: 6.

Prerequisite: GER 275, 285 or consent of instructor

GER 355
The Holocaust in German Culture (in English)
This course focuses on literary responses to the Holocaust, but it also deals with film and the issue of commemoration. After a discussion of the difficulty of representing the Holocaust, the course examines the Holocaust's role in the construction of German-Jewish identity and its impact on post-war German culture. Taught in English. German majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in German. Units: 6.

Also listed as History 311

Prerequisite: Sophomore standing or consent of instructor

GERMAN

GER 357
Film in Germany (in English)
This course selects from 90 years of filmmaking in Germany. Films range from expressionism to Nazi propaganda and from escapist comedies to avant garde art. Learning to “read” German films critically also means finding out how to understand movies from Hollywood and beyond. Possible topics include “From Caligari to Hitler,” “German Literature as Film,” and “What Makes Lola Run.” Taught in English. German majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in German. Units: 6.

Also listed as Film Studies 357, Theatre Arts 351

GER 359
Inventing Germany (in English)
Students use literary and non-fiction texts to examine German national identity as it developed from the French Revolution through Bismarck and two world wars to “reunification” in 1990. Topics include the role of Germany in Europe, the legacy of divided Germany, and diversity in German society today. Taught in English. German majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in German. Units: 6.

Also listed as History 310

GER 361
Vampires, Monsters, and Man-Eaters (In English)
This course seeks to reveal the ways in which the question of monstrous difference is articulated in a variety of German “texts.” Its main goal is to examine the ways that representations of monstrousness are employed to stage complex public and private anxieties as well as to provide an expression of rebellion against various systems of hierarchy. Featured in the works of canonized authors as well as within the realm of popular culture, the representational functions of the monster can provide valuable insight into numerous aspects of German history and psychosexual relations. Units: 6.

Also listed as Gender Studies 361, Film Studies 361

GER 362
Vampires, Monsters, and Man-Eaters
This course seeks to reveal the ways in which the question of monstrous difference is articulated in a variety of German “texts.” Its main goal is to examine the ways that representations of monstrousness are employed to stage complex public and private anxieties as well as to provide an expression of rebellion against various systems of hierarchy. Featured in the works of canonized authors as well as within the realm of popular culture, the representational functions of the monster can provide valuable insight into numerous aspects of German history and psychosexual relations. Units: 6.

Also listed as Gender Studies 362, Film Studies 362

Prerequisite: GER 312

GERMAN

GER 375
Novellen
Although Novellen developed as a literary form throughout Europe, it was particularly popular in Germany from the late 18th through the 20th centuries. This course introduces students to the Novelle as a form, to a variety of interesting works of literature and to the cultural, social and political developments in which Novellen were written and read. Units: 6.

Prerequisite: GER 312

GER 410
Medieval German Literature
A study of representative works from the Old and Middle High German period. The thematic focus will vary, but topics include the concepts of loyalty and honor and how they changed with the influence of Christianity, the Arthurian legend in German literature as compared to other traditions, and representations of women in medieval German literature. Units: 6.

Prerequisite: GER 312 or consent of the instructor

GER 411
Fascism and Film (in English)
This course lets students examine films that were ostensibly made as entertainment or explicitly crafted as propaganda in the historical context of Nazi Germany and occupied France. Aside from learning how governments and their cinematic agents used this relatively new medium to shape public opinion (in support of the war, against Jews, etc.) students will see where and how resistance was possible. Units: 6.

Also listed as Film Studies 412

GER 416
Kinder- und Jugenliteratur
This course examines the development of the distinct genre of literature for children and adolescents since the 18th century. It combines the analysis of classic texts, e.g., Heidi or Karl May, with close readings of modern cult classics. Units: 6.

Prerequisite: GER 312 or consent of instructor

GER 417
Deutsche? Demokratische? Republik?
In the years since the fall of the Berlin Wall in 1989, both the promise and the problems of the German Democratic Republic have faded from memory. Indeed, the experience seems to have receded into the distant past. This course explores both the lofty goals and difficult circumstances of the DDR's birth and its gradual decline and fall. The course pays particular attention to literary and filmic representations of hope and fear that the country engendered. Units: 6.

Prerequisite: GER 312

GERMAN

GER 418
Topics in German Cultural Studies
Topics in German Cultural Studies allows for an in-depth examination of topics across time, for example, women's writing or crime fiction, or it permits a detailed analysis of special topics, for example, Turkish-German culture in contemporary German film.

Topic for Spring 2011: Der deutsche Krimi George Bernard Shaw famously quipped that the "Germans lack talent for two things: revolution and crime novels." Despite his negative appraisal of the genre, the "Krimi" has an illustrious past dating back to the early 18th century. In this course we will examine the history of the mystery and detective genre in the German-speaking countries and in particular will investigate its unique development. Why is there no German Edgar Allan Poe, Sherlock Holmes or Agatha Christie? What accounts for the delay in the appearance of the "hard-boiled" wise-cracking private detective as in the U.S. pulp tradition of Sam Spade or Philip Marlowe? Why was there an "Edgar Wallace boom" in the 1960s and '70s in which nearly 40 of the British crime writer's novels were adapted to film? What social issues does the Krimi address and what questions about knowledge and detection does it attempt to answer? Is the Krimi a genre unique to the German-speaking countries? Possible subgenres that we will read from include Frauenkrimis, animal Krimis, Soziokrimis, "ethnic" detective fiction, regional Krimis, hard-boiled detective fiction, serial novels.

Units: 6.
Prerequisite: GER 312

GER 441
The Fantastic and Grotesque in German Art and Literature (in English)
The course examines expressions of the fantastic and grotesque in literature from the 18th to the 20th centuries; it will also incorporate film and other visual versions of several texts. Works range from the fairy tales collected by the brothers Grimm to the fanciful and ominous creations of E.T.A. Hoffmann and others working in that tradition. Taught in English. German majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in German. Units: 6.

GER 442
The Fantastic and Grotesque in German Art and Literature
The course examines expressions of the fantastic and grotesque in literature from the 18th to the 20th centuries; it will also incorporate film and other visual versions of several texts. Works range from the fairy tales collected by the brothers Grimm to the fanciful and ominous creations of E.T.A. Hoffmann and others working in that tradition. Taught in German. Units: 6.

Prerequisite: GER 312 or consent of the instructor

GER 443
German Expressionism in Art and Literature (in English)
The course focuses on the two faces of expressionism: its ecstatic missionary aspect and its darker pessimistic side, as both are manifested in poetry, drama, and art. It will show how the missionary aspect was perversely appropriated by the Nazis, who distorted Nietzsche's "Übermensch" and declared expressionist art "degenerate." Lawrence's LaVera Pohl Collection of German Expressionists serves as a resource. Taught in English. German majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in German. Units: 6.

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Prerequisite: GER 312 or consent of the instructor

GER 446
"Ideal Immigrants"? The German Experience in America
This course explores what it used to mean to be German in the United States and what it means today: bratwurst, beer, and Oktoberfest. Students will consider issues raised by 19th-century immigration that still reverberate in Germany and America: cultural pluralism vs. assimilation, linguistic diversity vs. single national languages, citizenship vs. "guest" workers. Taught in German. Units: 6.

Also listed as Ethnic Studies 381 Prerequisite: GER 312 or consent of instructor

GER 447
The Literature and Culture of Ethnic Minorities in Germany
Despite a long-term refusal to open itself to immigration, Germany has become a nation of immigrants and asylum-seekers. The course focuses on how both literature and films, including works by and about minorities in Germany, have dealt with key cultural phenomena: multiculturalism, diversity, acculturation, assimilation, "majority culture," and parallel societies. Units: 6.

Also listed as Ethnic Studies 382, Film Studies 447

Prerequisite: GER 312 or consent of the instructor

GER 449
Nature and the Environment in German Literature (in English)
This course examines the literary, philosophical, and sociological history of ecological issues in Germany. Students investigate the formulation of the specifically German concept of nature and study the roles of Romanticism and of the early 20th-century youth movement in shaping contemporary environmental debates. Taught in English. German majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in German. Units: 6.

Also listed as Environmental Studies 449

GERMAN

GER 450
Nature and the Environment in German Literature
This course examines the literary, philosophical, and sociological history of ecological issues in Germany. Students investigate the formulation of the specifically German concept of nature and study the roles of Romanticism and of the early 20th-century youth movement in shaping contemporary environmental debates. Taught in German. Units: 6.

Also listed as Environmental Studies 450

Prerequisite: GER 312 or consent of instructor

GER 540
Romantic Love in German Literature
Drawing from exemplary texts of the 18th to the 20th century, this course engages the student in a discussion of the concept of intimacy and how it changed over time because of socio-economic and cultural transformations. The way love is experienced depends in large part on the semantics of love — *i.e.,* on the way meaning is structured to express emotional immediacy and authenticity. Units: 6.

Prerequisite: GER 312 or consent of instructor

GER 541
Studies in 18th-Century Literature and Culture
This course examines the gradual secularization of German society that culminated in the Enlightenment. As church and court patronage diminished, middle-class Germans became both the heroes and consumers of artistic productions. Issues of artistic taste that arose in the 18th century remain vital today. Units: 6.

Prerequisite: GER 312 or consent of instructor

GER 542
Studies in 19th-Century Literature and Culture
This course selects from important developments in 19th-century German culture. Topics include the Romantic revolt against rationalism, the rise of the novel, the development of politically engaged literature, the modernist attack on an increasingly smug national culture, and the problems of mass and middlebrow culture. Units: 6.

Prerequisite: GER 312 or consent of instructor

GER 543
Studies in 20th-Century Literature and Culture
This course explores various themes in 20th-century culture, most importantly the impact of modernity on the German imagination. Possible topics include the rise of Expressionism and Dada, art and culture of the Weimar Republic, the development of popular and middlebrow culture, Nazi aesthetics, the art and culture of the 1950s and 1960s, and literature in divided Germany. Units: 6.

Prerequisite: GER 312 or consent of instructor

GERMAN

GER 544
Studies in Contemporary Literature and Culture
This course deals with current cultural, economic, political, and social issues in Germany, Austria, and Switzerland. Topics include the ongoing process of German unification, the situation of women and minorities, reckoning with the Nazi past, and new developments in German literature. Units: 6.

Prerequisite: GER 312 or consent of instructor

GER 552
The Devil's Pact
Goethe's *Faust* remains the centerpiece in this examination of the Faust legend, but its context includes both Goethe's predecessors and more recent versions of the Faust story in literature, music, and film. This course pays particular attention to the decades-long development of Goethe's text and the place *Faust* occupies in German culture. Taught in German. Units: 6.

Prerequisite: GER 312 or consent of instructor

GER 600
Senior Seminar
Students and the instructor decide in advance on a specific topic or common theme. They read and discuss texts at the beginning of the term. Students then formulate their own projects, which may take them in a direction of their own choosing (literature, history, music, art, etc.). Units: 6.

Prerequisite: Declared major in German

GER 390, 590, 690
Tutorial Studies in German
Individual study arranged and carried out in close consultation with an instructor. Units: Variable.

Prerequisite: Counter Registration Required.

GER 191, 391, 591, 691
Directed Study in German
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

GER 195, 395, 595, 695
Internship in German
An opportunity for students to apply their German language skills in business, government, and the non-profit sector on the regional, national, and international level. Arranged in collaboration with and supervised by a member of the department. Includes readings, discussion, report, and/or portfolio. Advance consultation and application required. Units: 2 OR 3.

Prerequisite: Counter Registration Required.

GERMAN

GER 399, 599, 699
Independent Study in German
Advanced research on a topic of the student's choice, arranged in consultation with the department. Students considering an honors project should register for this course. Units: Variable.

Prerequisite: Counter Registration Required.

GOVERNMENT

Professors: Adenwalla, Hah
Associate professors: Hixon* (Gordan R. Clapp Chair in American Studies, chair terms I and II), Skran (Edwin & Ruth West Professorship in Economics and Social Science), Wulf (chair term III)
Assistant professors: Balsekar, Brozek (Stephen Edward Scarff Professor of International Affairs), Shober
No-ranknames: Perina, Wyeth

* On leave Term(s) III

Instruction in the government department responds to an intensely political age and its intellectual challenges. Our main objective is to help students learn how to explain, interpret, and evaluate political institutions, policies, behaviors, and beliefs. Majors learn how to employ a variety of methods to analyze political phenomena, as well as how to defend their analyses with rigorous, evidence-based arguments.

The introductory course (Government 110) provides an introduction to the analysis of the contemporary political system primarily through an examination of the theory and practice of American government. Students proceeding further are introduced to the major problems of political analysis and to the interplay of theory and data before going on to advanced courses in American politics and policy, comparative politics, constitutional law, international politics, and political theory.

A major in government prepares students for success in a wide variety of careers including politics, law, business, teaching, or non-profit work. Those who pursed advanced degrees have done so in political science, business, law, international relations, public policy, history, medicine, education, urban planning, development studies, and many other fields.

2010-2011 Course Catalog

Required for the government major

1. Government 110: *Introduction to Political Science*
2. One of the following courses in American politics:
    - Government 220: *American Elections, Candidates, and Political Parties*
    - Government 360: *The American Presidency*
    - Government 370: *Congressional Politics*
    - Government 380: *Introduction to Public Policy*
3. Government 340: *International Politics*
4. Government 245: *Comparative Politics of Developing Countries*
5. One of the following courses in political theory:
    - Government 200: *Politics and Human Nature*
    - Government 235: *American Political Thought*
    - Government 315: *Founding the Just Regime*
    - Government 405: *Individuality and Community in Modern Politics*
6. Two six-unit courses numbered 400 or above, including seminars (Government 500), only one of which may be an advanced independent study or tutorial.
7. A total of at least 10 six-unit courses for the major
8. Students may count one cross-listed course in economics for the major.
9. C average in the major

GOVERNMENT

Required for the government minor

1. Government 110: *Introduction to Political Science*
2. One six-unit course in American politics
3. One six-unit course in political theory
4. Two six-unit courses from the fields of comparative politics and international relations
5. One six-unit course at the advanced level numbered 400 or above, excluding tutorials and independent studies
6. A total of at least six six-unit courses, four of which must be numbered 200 or above
7. C average in the minor

Off-campus study
See Washington Semester

Senior Experience in Government
The Senior Experience in Government will allow seniors to pursue a capstone research project, an academic internship in government or politics, or other culminating work chosen in consultation with faculty advisors.
Capstone research projects may be pursued through a senior seminar, in approved upper-level courses or independent studies, or through work toward an honors thesis.

Courses

GOVT 110
Introduction to Political Science
An introduction to the nature of contemporary politics and government. Topics drawn primarily from American national, state, and local government and politics, with other political systems introduced for comparative purposes. Emphasis on such major concepts as power, legitimacy, political culture, conflict, and rational choice and on an examination of how a political system manages problems related to political change. Units: 6.

GOVT 140
Introduction to International Relations
An introductory study of the cultural, political, and economic interactions among states and non-state actors in global politics. Special attention is paid to key issues, including international security, foreign policy decision-making, and the role of diplomacy in promoting cooperation. Required for the interdisciplinary area in international studies. Units: 6.

GOVT 150
Introduction to Global Studies
An introduction to the economic, political, social, and cultural aspects of globalization. Special attention will be paid to the influence of globalization on particular regions of the world, including Europe and North America, the former Soviet Union, East Asia, Africa, and Latin America. Emphasis will be placed on the role of cross-cultural diplomacy in a global world. As part of the course, students will participate in a simulation of an international negotiation. Units: 6.

GOVERNMENT

GOVT 200
Politics and Human Nature
What activities are most appropriate for human beings? What is the purpose of political activity? What is the best practicable constitution for a political community? This course examines several philosophers' arguments concerning the best political regime in light of their respective visions of human nature and happiness. Units: 6.

Prerequisite: FRST 101

GOVT 211
Flexibility and Freedom: American Federalism in Transition
Federalism is a compromise between freedom and equality. How much authority should states and cities have over elections? Education? The environment? Observers characterize American federalism both as a bulwark against tyranny and a perpetrator of inequality. This course considers federalism's development, its contradictions, and its survival in a global society. Units: 6.

Prerequisite: GOVT 110 or consent of instructor

GOVT 215
Democracy in Comparative Perspective
This course examines the key elements of democratic systems, including those of the United States, Japan, Britain, and Mexico. The course highlights political culture, institutions, and political processes, as well as key issues facing democracies today. Particular attention is paid to policies and politics of race relations and environmental concerns. Units: 6.

GOVT 216
Alliances and Power Politics
An examination of the origins and development of U.S. alliances since 1945 that considers the internal and international politics of various countries, including Japan and the United States, explicitly employing relevant theories of politics, economics, and psychology. Units: 6.

Prerequisite: Completion of one term at Lawrence

GOVT 220
American Elections, Candidates, and Political Parties
A study of the development, organization, structure, and activities of American political parties, with special attention to the recruitment and selection of presidential candidates. Units: 6.

Prerequisite: GOVT 110 or consent of instructor

GOVT 226
Identity Politics and Ethnic Conflict
Are conflicts between identity groups inevitable? Why do outbreaks of violence and ethnic conflict occur when they do? How have governments dealt with diversity and with what consequences? Students will read both new and classic works from the literature on nationalism, identity politics, genocide and post-conflict resolution across the world. Units: 6.

Also listed as Ethnic Studies 226 Prerequisite: Sophomore standing or consent of instructor

GOVERNMENT

GOVT 235
American Political Thought
This course examines the character and historical development of American political thought. Students analyze ideas about liberty, virtue, equality, authority, and community expressed in political tracts and speeches from colonial times to the present. Units: 6.

Prerequisite: GOVT 110 or sophomore standing

GOVT 245
Comparative Politics of Less-Developed Countries
This course provides an introduction to politics in less-developed countries, paying close attention to differences within the so-called “developing world” and the impact of economic realities on politics. In doing so, it addresses questions about the relationship between economic development and democracy and the impact of globalization on poor countries. Units: 6.

Prerequisite: Sophomore standing and one of GOVT 110 or GOVT 140

GOVT 246
Latin American Politics
The course addresses the politics of our neighboring region, Latin America. This important world region is at a political crossroads today. Topics include historical precedents, institutional arrangements, democratization, inter-american governance, the politics of women, the rise of Chavez and the "new left", and indigenous organizing. Units: 6.

Prerequisite: Sophomore standing

GOVT 260
European Democracies
An examination of the historical development and contemporary characteristics of western European political systems that first compares the contemporary systems of Great Britain, France, and Germany and then focuses on challenges facing European democracies today, including environmental problems and increasing immigration. Particular attention is paid to the process of European integration and the role of the European Union. Units: 6.

Prerequisite: GOVT 110 or sophomore standing

GOVT 270
Global Environmental Politics
This course provides an examination of the environment as an issue in world politics. Emphasis will be placed on the role of both state and non-state actors (*i.e.,* the UN, NGOs) in global environmental regimes that are designed to deal with global warming, ozone depletion, and other environmental issues. Particular attention will be paid to the positions taken by both developed and developing countries. As part of the course, students will participate in a simulation of an international negotiation on an environmental issue. Units: 6.

Also listed as Environmental Studies 270

Prerequisite: Sophomore standing or ENST 150 or GOVT 110

GOVERNMENT

GOVT 271
Research Methods in Political Science
Considers research approaches and methods political scientists use to create knowledge. The course will explore quantitative and qualitative techniques with theory and hands-on applications. The goal of the course is to improve students' ability to read research critically and to make and test their own arguments in political science. Units: 6.

Prerequisite: GOVT 110 or consent of instructor

GOVT 274
Public Economics
Public economics covers a range of topics from taxation to social insurance and redistribution to homeland security. The course develops a template for framing and analyzing public policy issues that provides a basis for understanding the rationale for government intervention, the alternative policy instruments that can be used to affect economic outcomes, and the economic tools used to evaluate the effects of intervention. Units: 6.

Also listed as Economics 271

Prerequisite: ECON 100 or ECON 120

GOVT 275
Global Economic Relations
This course covers the major concepts utilized in the field of international political economy. Major issues covered include globalization, monetary policy, trade policy, and the role of international institutions such as the WTO. Units: 6.

Also listed as Economics 202

Prerequisite: ECON 100 or ECON 120

GOVT 276
Economic Development
Economic analysis of particular situations and policy questions faced by developing countries. Topics include economic growth and inequality, poverty, demographics, rural-urban transitions, factor and financial markets, and trade policies. Units: 6.

Also listed as Economics 200

Prerequisite: ECON 100 or 120

GOVERNMENT

GOVT 277
Political Economy of Regulation
This course focuses on the tension between politics and expertise that characterize the administrative regulatory state often called "the fourth branch of government." Several competing models of political economy shape an exploration of the continuing evolution of the U.S. regulatory system, the process by which regulations are proposed, written, implemented, and enforced, and the tools used to evaluate the costs and benefits of regulations. Units: 6.

Also listed as Economics 240

Prerequisite: ECON 100 or ECON 120

GOVT 278
Public Economics
Public economics covers a range of topics from taxation to social insurance and redistribution to homeland security. The course develops a template for framing and analyzing public policy issues that provides a basis for understanding the rationale for government intervention, the alternative policy instruments that can be used to affect economic outcomes, and the economic tools used to evaluate the effects of intervention. Units: 6.

Also listed as Economics 270

Prerequisite: ECON 100

GOVT 280
U.S. Foreign Policy
Analysis and interpretation of the nature, patterns, and trends of American foreign policy since World War II. Emphasis on the origins, development, and passing of the Cold War and on factors of continuing significance. Units: 6.

Prerequisite: GOVT 110 recommended

GOVT 315
Founding the Just Regime
Can a corrupt people create a just regime? What role must violence, deception, persuasion, and reflection play in promoting political justice? What are the ground and scope of citizens' political obligations? This course studies the difficulties of creating and reforming political communities. Units: 6.

Prerequisite: Sophomore standing

GOVT 320
Introduction to Constitutional Law
This course examines the American Constitution's structure and purposes; who may authoritatively interpret the Constitution; and legal debates that have attended American constitutional development. It focuses particular attention on competing claims about the founding; interpretive expertise and authority; the contract, commerce, and equal protection clauses; the separation of powers; and federalism. Units: 6.

Prerequisite: GOVT 110 and sophomore standing

GOVERNMENT

GOVT 321
Civil Liberties and the Supreme Court
A study of landmark 20th-century civil-rights and liberties cases in U.S. constitutional law. These cases involve critical constitutional issues concerning the nationalization of the Bill of Rights, freedom of speech and press, abortion and the right to privacy, desegregation and affirmative action. Units: 6.

Prerequisite: GOVT 110 or sophomore standing

GOVT 340
International Politics
An analysis of patterns of interactions of state and non-state actors in a system without supreme authority, focusing on alternative theoretical frameworks rather than substantive problems. Special emphasis on “realist” and “liberal” theories; the nature and uses of power in international politics; and issues of security, including conventional war, weapons of mass destruction, terrorism, environmental decay, and migration. Units: 6.

Prerequisite: GOVT 110 or 140 or sophomore standing

GOVT 351
Broadsides to Blogs: Mass Media in American Politics
From colonial broadsides to last night's blog, American politics has been enmeshed with mass media. Students will consider the roll of the mass media in shaping what citizens think about candidates for office, election campaigns, making of policy, and ultimately, governing. Does the mass media undermine democracy or strengthen it? Units: 6.

Prerequisite: GOVT 220 or consent of instructor

GOVT 360
The American Presidency
An examination of the politics of the American presidency, including the constitutional foundations of the office, elections, and the president's relationships with Congress, the courts, the public, media, and the executive branch. The main theme of the course is the difficulty of assessing presidential leadership, in particular sorting the effects of presidents' individual characteristics and strategies from contextual constraints and opportunities. Units: 6.

Prerequisite: GOVT 110, and MATH 107 or 177 or 207, or consent of instructor

GOVT 370
Congressional Politics
This course covers the basics of congressional politics, including elections, the constitutional framework, committees, parties, and legislative procedures. Thematic focuses include strategies of legislative coalition building and the relative importance of partisanship, constituent pressures, and policy expertise in congressional politics. Units: 6.

Prerequisite: GOVT 110 or consent of instructor

GOVERNMENT

GOVT 375
American Political Development
This course explores patterns in American political culture that have shaped American institutions. Attention is paid to historical context and alternate political arrangements once suggested but not taken. Students will engage two questions: Will American democracy work only in America? Do political structures or political culture better explain American institutions? Units: 6.

Prerequisite: Junior standing and GOVT 110 or HIST 131 or HIST 132

GOVT 380
Introduction to Public Policy
This course considers economic and democratic models for structuring the collective choices that become public policy. It then explores how major American institutions balance political control and technical expertise in the design, enactment and implementation of public policy. Units: 6.

Prerequisite: GOVT 110 or consent of instructor

GOVT 385
Modern British Politics
This course analyzes the central structures and processes of British politics, the important policy issues of recent years, British attitudes toward the political system, and critiques of British politics and history. *Offered at the London Centre.* Units: 6.

Prerequisite: Must be attending the Lawrence London Centre.

GOVT 405
Individuality and Community in Modern Politics
This course studies a variety of theoretical responses to the emergence of open societies in the West. Topics include the competing demands of individuality and community in religious, commercial, and political life. Units: 6.

Prerequisite: Junior standing or consent of instructor

GOVT 415
The History of American Political Thought
This course examines the character and historical development of American political thought. Students analyze ideas about liberty, virtue, equality, authority, and community expressed in political tracts and speeches from colonial times to the present. This course is more research intensive than Government 235. Units: 6.

Prerequisite: Junior standing or consent of the instructor. Students who have completed GOVT 235 may not take GOVT 415

GOVERNMENT

GOVT 425
Topics in International Security
This course is an exploration of the politics of international security. The specific topic will vary by term, but the concepts to be covered include bargaining, diplomacy, conflict and cooperation.

Topic for Winter 2010: The Rationality of Terrorism
From Palestine to Sri Lanka to New York to Baghdad, terrorism has proven to be one of the 21st century's most pressing security issues. For social scientists, terrorism raises a number of complex questions. Why does a group choose to engage in terrorism over some alternative? What influences an individual to become a suicide bomber? What anti-terror efforts are the most effective, and why? In this course, we will explore terrorism's historical roots, its causes, and its potential future. In particular, we will investigate the value of adopting a rational-choice model to explain and understand terrorism.

Units: 6.

Prerequisite: GOVT 340, GOVT 280, or junior standing.

GOVT 426
Topics in U.S. Foreign Policy
This course will address an advanced topic in American foreign policy, such as military intervention, humanitarian, aid, arms control, trade policy, or counter-terrorism. Whenever possible, this course will be designed, planned and taught in collaboration with the Distinguished Visiting Scarff Professor.

Topic for Fall Term 2010: Intervention and Conflict Resolution
This course examines the theory and politics of intervention, conflict resolution, mediation and crisis management in US foreign policy. It will be taught jointly by Professor Brozek and Dr. Rudolf Perina, the 2010-2011 Distinguished Visiting Scarff Professor. Dr. Perina is the former Deputy Assistant Secretary of State for Europe and Canada, United States Ambassador to Moldova, Director for European Affairs at National Security Council, Special Negotiator for Conflicts in the Former Soviet Union, and Deputy Director of State Department's Policy Planning Staff.

Units: 6.

Prerequisite: GOVT 280, GOVT 340, GOVT 380, or consent of instructor

GOVT 435
Voting, Political Participation, and Public Opinion
Who votes and why? How do individuals form opinions about politics? How are scientific surveys and polls conducted and what are their limitations? This course examines voting, participation, and public opinion formation (primarily in the United States) through theories of political psychology and rational choice. Units: 6.

Prerequisite: GOVT 220, 360, 370, or 380

GOVERNMENT

GOVT 445
Chinese Government and Politics
This survey course examines the political development of China from the Communist revolution to the present. Among the issues addressed are the legacies of the Maoist era, China's contemporary economic transformation and its social effects, political participation and protest in the contemporary era and the apparent perpetuation of authoritarianism. Units: 6.

Also listed as East Asian Studies 410

Prerequisite: Junior standing and one of EAST 150, GOVT 245, or HIST 360; or consent of the instructor

GOVT 446
Topics in Comparative Politics
This course will address an advanced topic in the sub-field of Comparative Politics, such as democracy and authoritarianism, politics of the city, political participation and social movements, gender and politics, or the comparative method.

Topic for Spring Term 2011: Democracy and Authoritarianism in Comparative Perspective
What are the reasons for the stability and collapse of democratic and non-democratic regimes? Topics include: the collapse of democracy in inter-war Europe, transitions to and from military rule in Latin America, democratic transitions in Africa and Eastern Europe, the persistence of authoritarianism in the Middle East, and the relationship between economic development and regime stability in Asia.

Units: 6.

Prerequisite: GOVT 245 or consent of instructor.

GOVT 465
Environmental Politics
An examination of the politics of environmental policy in the United States, including the organization and demands of the environmental movement and its opponents, the ways in which major actors and institutions in the U.S. system treat environmental issues, and such specific topics as environmental justice and the application of cost-benefit reasoning to environmental policy making. Units: 6.

Also listed as Environmental Studies 470

Prerequisite: GOVT 380 and either ECON 100 or ECON 300 or consent of instructor

GOVT 475
Games and Strategy in Politics
Political scientists often interpret politics as a game between strategic actors. This course surveys applications of game theory and social-choice theory to a wide variety of political phenomena, Units: 6.

Prerequisite: Junior standing or consent of instructor

GOVERNMENT

GOVT 480
International Organizations
An examination of the role of international organizations (IOs) in world politics, focusing on both the historical development and the contemporary functions of the United Nations and other IOs in regard to the promotion of international peace and security. Attention is also given to the role of IOs in regard to global issues such as peacekeeping, humanitarian intervention, and environmental protection and to regional organizations, especially the European Union. As part of the course, students will participate in a simulation of the United Nations. Units: 6.

Prerequisite: GOVT 140, GOVT 340, or consent of instructor

GOVT 490
International Law
A study of the role of law in international politics. Attention to the distinctive nature of the international legal system and to the relevance of international law to the control of violence, promotion of peace, protection of human rights, and management of resources. Current problems and the outlook for the future world order are assessed. Units: 6.

Prerequisite: GOVT 110 or 140 or sophomore standing

GOVT 495
Health Policy
A seminar addressing present and prospective health care policy in the United States. Emphasis on various contemporary health care problems, including high and rising costs, differences in access to medical service, and trade-offs between cost and quality. Specific topics include Medicare, Medicaid, medical malpractice, profit versus not-only-for-profit producers of care, and alternative delivery systems. Units: 6.

Also listed as Biomedical Ethics 495

Prerequisite: Sophomore standing or consent of instructor

GOVT 500
Senior Seminar in Government
Specific topics will be listed when scheduled.

Senior Seminar for Winter Term 2011: Refugees, Failed States, and Post-Conflict Peacebuilding
Units: 6.

GOVERNMENT

GOVT 550
Practicum in Environmental Studies
Practical experience working in either environmental policy development or environmental science fieldwork in a community. For example, students might work with businesses, trade organizations, state or local government, or non-profit advocacy groups. Students spend a minimum of ten hours per week at assigned settings and attend weekly supervision meetings with instructor. Practica can be done during the academic year (at local placements or on campus) or during the summer (at off-campus placements). Units: 6.

Also listed as Environmental Studies 560

Prerequisite: Sophomore standing and one course on environmental policy or law, including GOVT 206/ENST 302 or GOVT 306/ENST 301

GOVT 390, 590, 690
Tutorial Studies in Government
Advanced study, arranged and carried out under the direction of an instructor. Units: Variable.

Prerequisite: Counter Registration Required.

GOVT 191, 391, 591, 691
Directed Study in Government
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

GOVT 195, 395, 595, 695
Internship in government
Work with a government agency, legislative office, research institution, private employer, or other relevant organization, arranged under the direction of an instructor in the department. Units: Variable.

Prerequisite: At least one government course at the 200 level or above and consent of instructor; counter registration required

GOVT 199, 399, 599, 699
Independent Study in Government
Advanced research, arranged in consultation with the department. Students considering an honors project should register for this course, for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

HISTORY

Professors: Chaney, Cohen (Patricia Harnar Boldt Professorship in Liberal Studies), Doeringer, Podair* (Robert S. French Professor of American Studies)
Associate professors: Blitstein (chair), Kern**, Rico
Assistant professors: Frederick, Tsomu
Visiting assistant professor: Mahoney
Post-doctoral fellow: Norrgard
Lecturer: Truesdell

* On leave Term(s) II; ** On leave Term(s) III

Consciously or not, all of us operate as historians. We make judgments and decisions based on our knowledge, however inadequate, of what has gone before. Furthermore, we make sense of our own position in the present by composing and telling stories about where we have been in the past. The formal study of history — the critical examination of human accomplishments and failures — does likewise, and it greatly enhances our ability to judge and decide about both private matters and public issues. Although historical awareness does not offer immediate solutions to contemporary problems, it does lead to a better understanding of them. Studying what was remote in time and space provides important perspectives on politics, society, and culture — as well as ourselves.

2010-2011 Course Catalog

Required for the history major

1. The minimal requirement for the major is 10 six unit courses.
2. Students must complete a sequence of three courses specifically designed to promote the skills and method of disciplined historical inquiry and to culminate in the production of an original and substantial piece of historical research. These courses must be taken in order and at specified times, so students must take special care when planning their advancement through the major.
    a. Students are required to take History 101: *Clionautics: An Introduction to Doing History*, during their freshman or sophomore year.
    b. Students are required to take History 620: *Historiography*, during their junior year.
    c. Students are required to take History 650: *The Practice of History*, during their senior year. Exceptions may be granted, however, for majors who petition to complete a piece of advanced and original historical research in suitable off-campus programs.
3. Students must complete seven additional courses that will serve both to broaden and to deepen their historical knowledge. One of the seven courses must be a seminar or independent study in which students will begin a research project to be completed in History 650.
    a. Students are required to take at least one six-unit course from each of the following three categories: North America (NA), Europe (E), and Global and Comparative (G&C).
    b. Students are required to take at least one course that covers materials up to the year 1750.
    c. Students are required to take at least one course designated as a seminar (numbered between 400 and 599) or one designated as an independent study

(numbered between 400 and 599), during their junior year or during the Fall Term of their senior year.
   d. Students are encouraged to take as many additional courses focusing on their own areas of interest as they and their advisors deem appropriate for the completion of the major.
4. Students must have a C average in the major.

Required for the history minor

1. The minimal requirement for the minor is 6 six-unit courses.
2. Students must take at least one introductory course (numbered between 100 and 199).
3. Students must take at least five additional courses.
   a. No more than one may be an introductory course.
   b. At least one must be a seminar or independent study (numbered between 400 and 599).
4. Students must have a C average in the minor.

Off-campus Study
The history department encourages majors, whenever possible, to participate in one of the off-campus programs offered either by Lawrence or under the auspices of the Associated Colleges of the Midwest or other consortial arrangements. The Lawrence London Centre and the ACM Newberry Library Program have proven to be of particular interest to history majors, though majors have benefited from participation in numerous others — especially those that match up with students' area interests (see Off-Campus Programs).

Graduate School
Students who are considering graduate studies in history should know that most doctoral programs require one or more (usually two) foreign languages and should work closely with their advisors to plan their schedules accordingly.

Advanced Placement
Students who have earned a 4 or better in the Advanced Placement Examinations in American History, European History, or World History will receive six units of credit in history and may use that credit in partial fulfillment of the major. (History majors should consult with their advisors to determine which departmental introductory course their AP credit might replace.) These same students are strongly encouraged to consult with any member of the department about appropriate placement in courses above the introductory level.

***Senior Experience* in History**
The *Senior Experience* in the History Department consists of a collaborative one-term seminar culminating in an original and substantial piece of historical research. Students will be introduced to the standards of research and writing common to the historical profession and will be guided, as apprentice historians, through their own individual projects.

The Practice of History represents the culmination of a course sequence that includes Clionautics: An Introduction to Doing History and Historiography. It is open to history majors who have completed an advanced seminar, tutorial, or independent study and have outlined a research topic that they are prepared to pursue intensively.

HISTORY

Courses

HIST 101
Clionautics: An Introduction to Doing History
An introduction to the practical skills of doing history aimed at freshmen and sophomores planning to major in history and others seriously interested in learning how to navigate the waters of historical study. Emphasis is on acquiring the techniques current historians use to research into the past, making sense of their findings, and presenting them to others in a variety of media. Using materials appropriate to a theme that changes from year to year, students will discover how to do a thorough bibliographical search of all major genres of historical works, to find and interpret primary sources, and master the basic historical essay. Units: 6.

HIST 110
The Emergence of the Modern World
An introduction to world history from 500 to 1750. Attention to global change through the emergence of world systems, as well as the development of worldwide commercial and colonial empires. Thematic focus on the nature of cross-cultural relations and the dynamics of power and resistance. Special emphasis on analysis of documents and historical interpretations. (G&C or E) Units: 6.

HIST 115
The Modern World
An introductory examination of the development of modern global civilization from the end of the 18th century to the early 21st century, surveying the final modernization of the West through successive waves of political, industrial, and social revolutions and exploring the worldwide reaction to the spread of modern mass society brought about by Western efforts at global domination. Special emphasis on analysis of documents and historical interpretations. (G&C or E) Units: 6.

HIST 125
Modern Africa Since 1800
The history of Africa from the end of the trans-Atlantic slave trade to the present. We will discuss the effects of abolition on Africa, the nature of pre-colonial African societies on the eve of conquest, the European "Scramble for Africa," the colonial era, African nationalism and decolonization, and the post-colonial period. Themes will cover social, political, economic, and religious history. (G&C) Units: 6.

Also listed as Ethnic Studies 120

HIST 130
Colonies to Republic: British North America, 1607-1789
A survey of North American history from the arrival of the first European voyagers through establishment of the Republic in 1789. Emphasis on the major political, intellectual, social, and economic changes of the period and on the nature of historical inquiry and analysis. (NA) Units: 6.

HISTORY

HIST 131
Republic to Nation: The United States, 1789-1896
A study of the major social, political, economic, and intellectual developments in American society from 1789 through 1896. Topics include the industrialization of the economy, the diversification of the population, the democratization of American politics, and the evolution of an American character. (NA) Units: 6.

HIST 132
Nation in a Modern World: The United States, 1896-Present
An examination of reform, dissent, and protest in the United States as it passed through eras of economic transformation, social crises, technological revolution, and international confrontation. Emphasis on domestic history, including the reforms of the Progressive-Great Depression eras, the Civil Rights Movement, and civil protest during the Vietnam period. (NA) Units: 6.

HIST 135
American Indian History: Pre-Contact to 1830
An introductory survey exploring American Indian history from the period preceding contact with African and Europeans to the era of removal. Focuses on the social, cultural, political and economic diversity of native peoples and their experiences with European colonialism. Units: 6.

Also listed as Ethnic Studies 135

HIST 136
American Indian History 1830 to the Present
This is an introductory survey exploring American Indian history from the removal era to the present. This course explores the social, political, and economic challenges Native people faced as a result of American expansion and colonialism. It focuses on the ways in which American Indian communities transformed in response to these changes, as well as their persistence and integrity as tribal nations in the present. Units: 6.

Also listed as Ethnic Studies 136

HIST 140
Gender and Feminism in Historical Perspective
A comparative world history of both gender relations and the emergence of a feminist consciousness within the past 500 years. Case studies drawn from different regions of the world will precede the examination of the emergence of a global feminism in the late 20th and early 21st centuries. Topics will include the social roles of men and women, ideas about masculinity and femininity, understandings of sexual orientation, forms of systematic subordination, and the politics of modern feminisms. (G&C) Units: 6.

Also listed as Gender Studies 110

HIST 145
Introduction to the Middle East
Provides an introduction to the history, geography and politics of the Middle East. General themes include the historical timeline, geographic characteristics, and political systems of the region. Additionally, students will pair primary source materials with traditional secondary texts to study specific thematic components such as terrorism, religion, and gender. Units: 6.

HISTORY

HIST 150
Stuart England, 1603-1715
This course explores the causes and impact of the English Civil War, the effect of the Restoration, the Glorious Revolution, and the path to the Hanoverian Succession. The economics, politics, religion, social history, and cultural aspects of the period are also studied. Visits to museums and buildings of the period are included. (E) *Offered at the London Centre.* Units: 6.

Prerequisite: Must be attending the Lawrence London Centre.

HIST 160
Traditional East Asian Civilization, 1800 B.C.-1600
An introductory survey of East Asia from the dawn of indigenous civilization to the 16th century. Focus on the growth of a Sinitic center and its interaction with the sedentary and nomadic peoples on its Inner Asian and Pacific rims. Emphasis on the diverse peoples and societies of the area and the historical processes that bound them together through a common tradition. (G&C) Units: 6.

Also listed as Ethnic Studies 121, East Asian Studies 140

HIST 165
Modern East Asian Civilization, 1600-1990
An introductory survey of the modern history of East Asia, examining the efforts of traditional states, particularly China and Japan, to respond to Western intrusion into the region after 1600. Focus on social and cultural problems created by attempts to modernize yet defend tradition and on the differing results of Chinese and Japanese approaches. (G&C) Units: 6.

Also listed as East Asian Studies 150

HIST 178
Colonial Latin American History
An introduction to the creation and rule of Colonial Latin America between the 15th and 19th centuries. Emphasis is on the patterns of conquest and cultural encounter, mechanisms of colonial rule, interaction between ethnic groups, and the cultural impact of the colonial experience upon Latin America's peoples. (G&C) Units: 6.

HIST 179
Modern Latin American History, 1821-Present
An introduction to Latin America, from 1821 to the present. Focus is placed on new nations as they struggle to create themselves, and weather the challenges of external influence. Emphasis on how Latin America has developed ethnically, politically, and economically and how these factors affect its position in the world today. (G&C) Units: 6.

HIST 180
Survey of Greek History
A study of ancient Greek history from the Bronze Age to 146 B.C. Emphasis on the rise and fall of the Greek city-state as a political, societal, and cultural model. Readings include the historians Herodotus and Thucydides. (E) Units: 6.

Also listed as Classics 150

HISTORY

HIST 185
Survey of Roman History
A study of the history of Rome from its origins through the Republic and Empire to 410 A.D. Emphasis on political and cultural developments and the acquisition of empire. Readings may include Livy, Tacitus, Suetonius, and the *Historia Augusta*. (E) Units: 6.

Also listed as Classics 160

HIST 200
American Experiences: An Introduction to American Studies
This course will introduce students to a pioneering interdisciplinary field. American Studies employs the disciplines of history, literature, politics, religion, art, music, film, and architecture, among others, to integrate a host of American experiences, examining "America" as a place, a nation, a symbol, a stereotype, and a culture. (NA) Units: 6.

Prerequisite: Sophomore standing or above

HIST 201
The History of American Cities
This course examines the development of American urban centers from the colonial era to the present, focusing especially on the evolution of the physical environment, urban political economy, structures of race, class, and gender, suburbanization, and responses to the urban crisis. Units: 6.

Prerequisite: Sophomore standing

HIST 205
Cross-Cultural Contacts in the Early Modern World
Examines contacts among various peoples between 1350 and 1750. Focus on cultural or ethnic identity, the role of power in relations between groups, and theoretical problems involved in such study. Examples include ancient and medieval cultural contacts, European settlement in North and South America, the African slave trade, and contacts among the peoples of Southeast Asia, India, China, and Japan. (G&C) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HIST 235
Periclean Athens
A study of the history of Athens from the end of the Persian Wars to the execution of Socrates (479 to 399 B.C.). A wide range of material and topics will be considered: social and political developments, warfare, empire, diplomacy, intellectual and cultural life. Emphasis on the revolution in ideas and visions of humanity that defined the golden age of classical Greece. (E) Units: 6.

Also listed as Classics 300

Prerequisite: Sophomore standing or consent of instructor

HISTORY

HIST 240
Augustan Rome
An introduction to ancient Rome and Roman civilization, focusing on the Age of Augustus in all its aspects: art, literature, politics, empire, law, entertainment, and society. Emphasis on the political and cultural changes that took place during this revolutionary period. (E) Units: 6.

Also listed as Classics 310

Prerequisite: Sophomore standing or consent of instructor

HIST 245
History of England to 1485
A study of the history of England (and, to a lesser degree, Scotland and Wales) from prehistoric times to the accession of the House of Tudor. Special attention to the history of London. Especially recommended for, but not limited to, students going to the London Centre. (E) Units: 6.

HIST 246
Modern Britain, 1688 to the Present
This course surveys the history of Great Britain from the political upheavals of 1688 to the present day. Emphasis will be on broad political and economic themes: the development of parliamentary democracy, the growth of modern industrial capitalism, and the extension and eventual collapse of the British Empire. We will also examine some of the major cultural and intellectual achievements of the period. (E) Units: 6.

Prerequisite: Sophomore standing

HIST 247
The Impact of Empire on Great Britain, 1814-1914
In 1914 the British empire contained a population of over 400 million people and was territorially the largest empire in world history. While the British spread their ideas about government, language, religion, and culture to their colonies, Britain itself was also profoundly influenced by the colonies it ruled. This course will explore aspects of the impact of the Empire on British politics, economics, society, and popular culture during the 19th century. Among the topics to be covered are the anti-slavery movement, imperialism and new imperialism, jingoism and popular culture, economic responses, and the influence of imperialism on culture and the arts. The myriad resources of London will be used to provide specific examples of how important the Empire was in shaping British identity and institutions during the 19th century. *Offered at the London Centre.* (G&C or E) Units: 6.

Prerequisite: Must be attending the Lawrence London Centre.

HIST 249
The Early Middle Ages: 400-1000 A.D.
A study of European history from the Decline of Rome and the Barbarian Invasions through the age of Viking expansion, the Ottonian Empire, and the rise of feudalism, with emphasis in intellectual, cultural, and institutional development. (E) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HISTORY

HIST 250
The High Middle Ages: Papal Revolution to Dante
A study of the High and Late Middle Ages, with emphasis upon intellectual, cultural, and institutional development, from the Papal Revolution, Scholasticism, and the Crusades through the 13th century and its changes in such concepts as time, space, and matter. (E) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HIST 260
Culture and Power in Renaissance Europe
A study of intellectual, artistic, and religious innovations and their relation to dynamic political and social transformations between roughly 1350 and 1550. Beginning with the concepts of rediscovery, rebirth, and renewal as expressed in the writings of Renaissance Humanists, the course will explore how a new cosmology informed changes in artistic expression, political theory and practice, production and commerce, overseas expansion, popular ritual and spectacle, gender relations, and understandings of the self. (E) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HIST 261
Rebellion and Discipline in Reformation Europe
An examination of the religious fragmentation of Christian Europe and its social and political aftermath from 1500 to 1715. The course will survey how revolt against the church evolved into a series of rebellions against authority — peasants against nobles, cities against overlords, and nobles against monarchs — and eventually culminated in a reassertion of social discipline through the consolidation of the state's power, the formation of confessional orthodoxies (Lutheran, Calvinist, Catholic), an increased policing of morality, and the domestication of men's and women's roles in society. (E) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HIST 270
Europe in the Age of Revolution, 1789-1851
An examination of European history from the French Revolution through the revolutions of 1848, focusing on the socioeconomic, political, and ideological configurations that emerged out of the French and Industrial Revolutions. Topics include the rise of liberalism, nationalism, socialism, and the modern state within their various historical contexts. (E) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HIST 275
Europe in the Age of Nationalism, World War, and Totalitarianism, 1851-1990
An examination of European history from the Age of National Unification through the collapse of the Soviet Empire. Topics include imperialism, the two World Wars, the Russian Revolution, fascism, totalitarianism, mass nationalism, and the reemergence of eastern and central Europe. (E) Units: 6.

Also listed as Ethnic Studies 221

Prerequisite: Sophomore standing or consent of instructor

HISTORY

HIST 276
Spy vs. Spy: Espionage and the Cold War
An examination of the Cold War through the lens of intelligence and espionage. Themes include the origins of the CIA and KGB, Soviet and American intelligence successes and failures, mass hysteria and popular fascination with spies, and the contribution of espionage to the Soviet collapse. (G&C) Units: 6.

Prerequisite: Sophomore standing or consent of instructor. HIST 132 or 325 recommended

HIST 277
Eastern Europe in the 20th Century
This course surveys the history of the peoples of Eastern Europe from the First World War until the collapse of Communism. Themes include the collapse of empires and rise of nation-states, revolution and counter-revolution, the consequences of relative economic backwardness, and the impact of totalitarian ideologies such as fascism and communism on the everyday lives of people. (E) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HIST 280
Religion, Magic, and Witchcraft in Early Modern Europe
Witchcraft and witch-hunting in Europe between 1350 and 1750. An examination of the concepts of religion and magic and an exploration of such topics as magical practices, the relationship between heresy and magic, the evolution of witchcraft, the dynamics and demise of witch-hunting, the role of gender, and definitions of societal deviance. Readings in primary sources and modern historical and anthropological scholarship. (E) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HIST 281
Thinking About Harry Potter
A course in contemporary history focusing upon Harry Potter as a cultural phenomenon. Students with an already copious knowledge of J.K. Rowling's stories will further explore them in terms of their relation to history, legend, and myth; their contested aesthetic merit and ethical values; and their broader social and political implications. Units: 6.

HIST 290
Modern European Thought I, 1500-1800
A close examination of 17th- and 18th-century intellectual trends (during the Scientific Revolution and Enlightenment) that influenced the epistemological, scientific, and political assumptions of the modern world. Works by such authors as Galileo, Bacon, Descartes, Hobbes, Newton, Locke, Voltaire, Rousseau, Goethe, and Wollstonecraft will trace the displacement of divine authority by human authority as the basis of knowledge in what some modern philosophers have called the "Quest for Certainty" that followed the 16th century. (E) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HISTORY

HIST 291
Modern European Thought II, 1789-present
An examination of modern thought focusing on the problem of self and society since the late 18th century. Topics include individualism and individuality, “economic man,” socialism, feminism, fascism, existentialism, and post-modernism. Readings from Adam Smith, J. S. Mill, Dostoevsky, Marx, Freud, Woolf, and Foucault. (E) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HIST 295
Nationalism in Modern History
An examination of the idea and the reality of nationalism in modern history. Among the questions we will ask are: Is nationalism a modern phenomenon, or does it have pre-modern origins? Is it compatible with democracy and human rights or fundamentally hostile to them? Is it primarily a European phenomenon transplanted to other places, or are there indigenous roots of nationalism throughout the world? We will attempt to answer these questions by reading theoretical works on nationalism from a variety of disciplines and by examining historical case studies. (G&C) Units: 6.

Also listed as Ethnic Studies 223

Prerequisite: Sophomore standing or consent of instructor

HIST 300
Reel Men: Masculinity in American Film, 1945-2000
Focusing on an array of well-known American films — “The Maltese Falcon,” “Red River,” “Dr. Strangelove,” “McCabe and Mrs. Miller,” “Chinatown,” “Die Hard,” and “American Beauty” among them — the course will integrate film theory, gender theory, and American history to address the problem of how masculinity has been constructed in American culture since World War II. Not open to students who have previously received, or need to receive, credit for HIST 400. (NA) Units: 6.

Also listed as Film Studies 300, Gender Studies 323

Prerequisite: Sophomore level or above

HIST 305
Film as History and History as Film
An examination, through selected films, of specific moments in European history and an examination of film itself as a source of historical interpretation. Possible “historical moments” include Medieval England, Nazi Germany, and the Holocaust, and possible films include *Becket, The Triumph of the Will,* and *Schindler’s List.* (E) Units: 6.

Also listed as Film Studies 305

Prerequisite: Sophomore standing or consent of instructor

HISTORY

HIST 310
Inventing Germany
Students use literary and non-fiction texts to examine German national identity as it developed from the French Revolution through Bismarck and two world wars to “reunification” in 1990. Topics include the role of Germany in Europe, the legacy of divided Germany, and diversity in German society today. Taught in English. German majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in German. (E) Units: 6.

Also listed as German 359

HIST 311
The Holocaust in German Culture (in English)
This course focuses on literary responses to the Holocaust, but it also deals with film and the issue of commemoration. After a discussion of the difficulty of representing the Holocaust, the course examines the Holocaust’s role in the construction of German-Jewish identity and its impact on post-war German culture. Taught in English. German majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in German. (E) Units: 6.

Also listed as German 355

Prerequisite: Sophomore standing or consent of instructor

HIST 315
Empire and Nation in Russian History
The course examines the history of ethnically diverse territories referred to as “Russia” from early modern times to 1991. Themes include the formation of the Russian empire, its transformation into the Soviet Union, and its partial collapse in 1991; the meaning of “empire,” “nation,” and “ethnicity “in historical context; and the interaction of Russians with non-Russian peoples in Ukraine, the Baltic States, Central Asia, and the Caucasus. (G&C) Units: 6.

Also listed as Ethnic Studies 320

Prerequisite: Sophomore standing or consent of instructor; HIST 320 or 325 recommended

HIST 320
Imperial Russia, 1682-1917
A history of the Russian Empire from the reign of Peter I through the revolutions of 1917. Themes include serfdom and its abolition, attempts at modernization, the emergence of political opposition to autocracy, cultural developments, and Russia’s role in the European state system. (G&C) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HISTORY

HIST 323
Topics in Russian History and Culture (in English)
An interdisciplinary course examining the relationship between politics and culture in Russia since the 18th century through the close analysis of a specific historical theme. Emphasis is placed on reading and discussing literary texts, historical primary sources, and, where applicable, watching films. Possible themes include: Power and Culture in the Russian Revolution, 1900-1936; The Soviet 1960s; and The Agony of Populism: Terrorism and Literature in Russia's Nineteenth Century. Not open to students who have previously received, or need to receive credit for HIST 423. Units: 6.

Also listed as Russian 323

Prerequisite: Sophomore standing and one course in Russian language, literature, or history

HIST 325
The Soviet Union, 1917-1991
A study of the creation of a socialist state on the territory of the former Russian empire. Themes include the revolutionary origins of the state, economic modernization and social transformation, the emergence of the Stalinist political order, nationality policy, intellectual and artistic activity, and the decline and collapse of the Soviet system. (G&C) Units: 6.

Prerequisite: Sophomore standing or consent of instructor

HIST 330
History of the American West
This course examines realities and images of the frontier/western experience from exploration and settlement of North America through the present. Included are native and immigrant groups, technology, transportation, agriculture, mining, and urbanization, as well as effects of the frontier on national character. (NA) Units: 6.

Also listed as Ethnic Studies 222

Prerequisite: Sophomore standing

HIST 333
American Indians in Wisconsin
A study of the diverse history, culture, and lived experiences of American Indian people in Wisconsin from pre-contact to the present. Emphasizes the adaptability of Wisconsin Indian communities in response to Euroamerican colonialism as it changed over time and the historical and contemporary relevance of tribal sovereignty and treaty rights. Units: 6.

Also listed as Ethnic Studies 333

Prerequisite: Sophomore standing or consent of instructor

HISTORY

HIST 335
Women in Early America, 1607-1860
An examination of the experiences of women in early America, focusing both on women's lives and on the changing economic, political, and cultural roles they played in American society. Themes include women and the family, women's religious experiences, women and industrialization, and the effects of slavery on black and white women. (NA) Units: 6.

Also listed as Gender Studies 220

Prerequisite: Sophomore standing or consent of instructor

HIST 345
Race Relations in the United States, 1865-Present
An examination of relations between black and white Americans since Emancipation. Topics will include Reconstruction, the rise of Jim Crow, the Great Migrations, the Civil Rights Movement, urban unrest, and white backlash. (NA) Units: 6.

Also listed as Ethnic Studies 321

Prerequisite: Sophomore standing and HIST 132

HIST 350
The 1920s, Great Depression, and New Deal, 1920-1945
After considering the 1920s as a "new era" in American history, the course examines the impact of the Great Depression upon American institutions and attitudes, with extensive analysis of the New Deal's domestic reform program and its creation of a national welfare state. (NA) Units: 6.

Prerequisite: Sophomore standing and HIST 132

HIST 355
History of the American Environment
North Americans have transformed the environment while being shaped by nature in turn. This course surveys the changing relationships between Americans and their physical environment in historical context from the 17th century to the present. Topics include the "Columbian exchange," agriculture, urbanization, conservation, and the emergence of contemporary environmentalism. (NA) Units: 6.

Also listed as Environmental Studies 355

Prerequisite: Sophomore standing

HIST 358
Race and Ethnicity in East Asia
This course will explore the use of the concepts of race and ethnicity in China and Japan to show how identity is constructed and used in forging national identity. The course will also examine transnationalism and the formation and articulation of ethnicity in East Asia. Units: 6.

Also listed as Ethnic Studies 334, East Asian Studies 358 Prerequisite: Sophomore standing

HISTORY

HIST 359
Introduction to Tibetan Culture and History
This course seeks to provide an introduction to Tibetan civlization and its history from its earliest recorded origins to the present. The course examines what civilizational forces shaped Tibet; the religious/cultural life of Tibet will be central to our study. Thematic topics, such as the economy and material culture, structures of power and legal codes will be examined in each chronological period. Units: 6.

Also listed as East Asian Studies 359

Prerequisite: Sophomore standing

HIST 360
Contemporary China, 1949-2000
A discussion course on selected issues in the social and cultural history of modern China. Literature, films, documents, and historical studies are examined to explore the intimate side of personal, family, and social life and the nature and impact of social and cultural changes in 20th-century China. (G&C) Units: 6.

Also listed as East Asian Studies 420

Prerequisite: Sophomore standing or consent of instructor; HIST 165 recommended

HIST 363
China's Renaissance
This course focuses on the transformation of China's society and economy during the Song dynasty (960-1279). We will analyze phenomena such as the replacement of an aristocracy by civil servants judged on merit, the liberalization of commerce, the spread of printing, and the reorientation of the Chinese philosophical tradition. (G&C) Units: 6.

HIST 365
Modern Japanese History, 1868-2000
A discussion course on modern Japanese history from the Meiji Restoration of 1868 to the present. This course focuses on Japanese efforts to build a new, westernized state and society compatible with Japan’s traditional “national polity” and to find a new role in modern East Asia and the world. Units: 6.

Also listed as East Asian Studies 365, Ethnic Studies 322

Prerequisite: HIST 165

HIST 371
The Rise and Fall of American Empires: The Americas, from the Beginnings Through the Conquest
A study of the Aztec, Inca, and Maya civilizations, focusing on cultural and technological development. Additional focus is on pre-Columbian cultural succession, imperial expansion of the Aztec and Incan empires, and native participation in the conquest. Units: 6.

Prerequisite: Sophomore standing

HISTORY

HIST 378
Ethnicity in Latin America
Explores the coming together of distinct Native, African, and European ethnicities in Latin America, and the resulting creation of new ethnicities. We examine how race has been understood in Latin American history and how attitudes toward race have fundamentally shaped the history of the region. Units: 6.

Also listed as Ethnic Studies 325

Prerequisite: Sophomore standing; HIST 178 or HIST 179 recommended

HIST 385
History of the Book
To provide an instruction to the interdisciplinary field of Book History, which should help students think more critically about the impact of material culture on intellectual activity. The course will be taught as a speaking intensive seminar, which means that students will frequently be responsible for presenting reading material and leading discussion in the first half of class. Units: 6.

Also listed as English 527

Prerequisite: Junior standing or consent of the instructor.

HIST 400
Reel Men: Masculinity in American Film, 1945-2000
At the upper level, the course will serve as a history seminar in preparation for the history department's capstone course. Those taking it at that level will be required to write at least one paper addressing film or gender theory and to write a 10-15 page research prospectus. Not open to students who have previously received credit for HIST 300. (NA) *Fulfills seminar requirement.* Units: 6.

Also listed as Gender Studies 423, Film Studies 400

Prerequisite: Junior standing or above

HIST 422
Revolt and Revolution in Latin America
This seminar investigates resistance in its many forms in Latin American history. Attention to abstract notions of “revolution” will be complemented by evaluating how particular episodes of violent unrest in Latin America have served as the tools of both the weak and the powerful. (G&C) *Fulfills seminar requirement.* Units: 6.

Prerequisite: Junior standing and HIST 178 or 179, or consent of the instructor

HIST 423
Topics in Russian History and Culture
An interdisciplinary seminar examining the relationship between politics and culture in Russia since the 18th century through the close analysis of a specific historical theme. Emphasis is placed on reading and discussing literary texts, historical primary sources, and, where applicable, watching films. Possible themes include: Power and Culture in the Russian Revolution, 1900-1936; The Soviet 1960s; and The Agony of Populism: Terrorism and Literature in Russia's Nineteenth Century. Students in this course will be expected to complete a research paper in preparation for the History Department's senior experience and will meet periodically with the instructor for that purpose. This course fulfills the seminar requirement for history majors. Not open to students who have previously received credit for HIST 323/RUSS 323.

Topic for Spring 2011: The Russian Revolution of 1971 A comprehensive investigation of the Russian Revolution of 1917. Major themes include the collapse of the Tsarist regime; the rise and fall of the Provisional Government; social polarization and class conflict; cultural and artistic experimentation; and the Bolshevik rise to power. Emphasis is placed on historiographical interpretations and close reading of diverse primary sources, including memoirs, diaries, political tracts, and literary texts.

Units: 6.

Prerequisite: Junior standing and either History 320 or 325, or consent of instructor.

HIST 425
Heroic Societies: History and Epic
A seminar in the use of epic prose and poetry, with related sources in archaeology, folklore, art, and other fields and in the reconstruction of past societies, their history, and worldviews. Epics read are the *Iliad, Beowulf, Vinland Sagas*, and the *Nibelungenlied*. (E) *Fulfills seminar requirement.* Units: 6.

Prerequisite: Junior standing or consent of instructor

HIST 430
Society and the Sexes in Pre-Industrial Europe
A seminar, organized topically, exploring changing gender definitions, economic and social roles, family structures and functions, and styles of intimacy from 1000 to 1800. A variety of primary sources and scholarly interpretations examined. (E) *Fulfills seminar requirement.* Units: 6.

Also listed as Gender Studies 415

Prerequisite: Junior standing or consent of instructor

HIST 431
Violence in Medieval and Early Modern Europe
A chronological and thematic examination of the understandings, uses, and effects of violence between roughly 1000 and 1800. Structured loosely around changing distinctions between licit and illicit forms of violence, the course will explore the transition from reliance upon self-help to well-articulated systems of jurisdiction at different levels of society. Topics will include warfare (feud, conflict among states, mercenaries, standing armies), jurisprudence (interrogation, torture, public execution), revolt (riot, rebellion), and interpersonal violence (criminal behavior, retribution). Readings will include a wide variety of documentary materials and scholarship. (E) *Fulfills seminar requirement*. Units: 6.

Prerequisite: Junior standing or consent of instructor

HIST 435
Nazism and Stalinism in Comparative Perspective
This course examines the political, social, and cultural histories of two of the 20th century's most notorious regimes. We will seek to determine what they had in common and, in doing so, answer the question, "What is totalitarianism?" (E or G&C) *Fulfills seminar requirement.* Units: 6.

Prerequisite: Junior standing and HIST 115 or 325, or consent of instructor

HIST 440
Themes in European Intellectual History, 1789-present
A seminar in the history of ideas, focusing on one of several topics that shift periodically. Possible topics include the concept of freedom in French thought since the Revolution and the rise of post-modernism in 20th-century Europe. (E) *Fulfills seminar requirement.* Units: 6.

Prerequisite: Junior standing and HIST 115 or consent of instructor

HIST 460
The Era of the American Revolution
A chronological and a topical approach to the causes, events, and consequences of the American Revolution. Narrative, fiction, film, and methodological sources are used to consider questions such as: Was the American Revolution revolutionary? What were the economic and social motives behind the war?; and How different was American society after the war? (NA) Units: 6.

Prerequisite: History 130 or consent of instructor

HIST 470
The American Civil War
A comprehensive examination of the Civil War era between 1840 and 1877. Major themes and topics will include the political crisis leading to secession, the military conduct of the war, the end of slavery, the effects of the war on American society, and Reconstruction. (NA) *Fulfills seminar requirement.* Units: 6.

Also listed as Ethnic Studies 420

Prerequisite: Junior standing and HIST 131, or consent of instructor

HISTORY

HIST 475
The History of America at Play
How serious is play? This class explores the ways in which seemingly frivolous activities — ordinary American entertainment — have reflected and shaped hierarchies of race, class, and gender as well as urban economies and landscapes. (NA) *Fulfills seminar requirement.* Units: 6.

Prerequisite: Junior standing and one of HIST 130, 131, 0R 132

HIST 479
Travel and Tourism in American History
This course explores the emergence of tourism in the United States from the early national period to the present, paying particular attention to the dynamics of ethnicity and gender in shaping tourism within modern consumer culture. We will study a variety of primary and secondary sources, including travel narratives and films. (NA) *Fulfills seminar requirement.* Units: 6.

Prerequisite: Sophomore standing and at least one of HIST 130, 131, or 132

HIST 480
Reconsidering the 1960s
A seminar examining the major themes and issues of the decade. Topics include Vietnam, the Great Society, civil rights, the counterculture, and feminism. Fiction, oral narrative, and the developing historiographical literature will be employed as aids in addressing the period. (NA) *Fulfills seminar requirement.* Units: 6.

Prerequisite: Junior standing and HIST 132

HIST 486
Commerce in Traditional China
China's state-directed economic growth has begun to make a significant impact on the global market, but it is only the most recent development in a long history of transformation. This course examines policies and attitudes concerning Chinese commerce up to the 18th century. Attitudes toward economic activities and society in Europe and Japan are also treated to provide a broader context. (G&C) Units: 6.

Prerequisite: Junior standing or consent of instructor

HIST 491
Borderlands in Modern East and Inner Asia: History, Culture, and Identity
Seminar on Euro-Asian borderlands, with a focus on East Asia during the Modern Period. Adopting a transnational approach, the course examines the fluidity of the concept of the "frontier," along with various understandings of what borderlands are, from the perspective of both indigenous peoples and those from afar. Units: 6.

Also listed as East Asian Studies 491

Prerequisite: Junior standing or consent of instructor

HISTORY

HIST 495
The Global Century, 1914-1991
A study of the 20th century from the perspective of its end rather than its start. Focus is on major world events and trends from a global rather than a regional point of view and with regard to the possible onset of a new contemporary stage of history. (G&C) Units: 6.

Prerequisite: Junior standing or consent of instructor

HIST 499
A History of Lawrence University
The course is a study of the history of Lawrence University, from its founding ideas to its modern form. We will consider how Lawrence fits into broader historical trends. This course will have a focus on primary research, particularly in the Lawrence archives. Units: 6.

Prerequisite: Junior standing or consent of instructor

HIST 510
The Origins of War
A study of the concerns that lead states to war through analysis of the strategic and diplomatic crises that precipitated two great historical conflicts: the Peloponnesian War in 431 B.C. and the First World War in 1914. Students will regard themselves as diplomats assigned to report on the developing situations. (E) Units: 6.

Also listed as Classics 510

Prerequisite: Junior standing or consent of instructor

HIST 620
Historiography
A seminar examining both philosophical and methodological aspects of historical studies. Readings include modern treatises on the nature of history, select works of important philosophers of history, and examples of contemporary approaches to historical research and writing. Units: 6.

Prerequisite: Junior standing or consent of instructor

HIST 650
The Practice of History
A collaborative senior seminar culminating in an original and substantial piece of historical research. Students will be introduced to the standards of research and writing common to the historical profession and will be guided, as apprentice historians, through their own individual projects. Open to history majors who, having completed an advanced seminar, tutorial, or independent study, have outlined a research topic that they are prepared to pursue intensively. Units: 6.

Prerequisite: Senior standing or consent of instructor

HISTORY

HIST 390, 590, 690
Tutorial Studies in History
A reading program, specially designed and implemented in consultation with an instructor. Writing is required. Students must consult in advance with the member of the department with whom they wish to work. Units: Variable.

Prerequisite: Counter Registration Required.

HIST 191, 391, 591, 691
Directed Study in History
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

HIST 195, 395, 595, 695
Internship in History
An opportunity for students to gain experience in public history. Students might work for a museum, historic site, government agency or archive, including the Lawrence University Archives. Arranged under the direction of an instructor in the department in accordance with the guidelines for academic internships as stated in the course catalog. Units: Variable.

Prerequisite: Counter Registration Required.

HIST 399, 599, 699
Independent Study in History
A research project organized in consultation with an instructor, culminating in a major research paper. Students must consult in advance (preferably during spring registration) with the member of the department with whom they wish to work. Students considering an honors project should register for this course. Units: Variable.

Prerequisite: Counter Registration Required.

INTERNATIONAL STUDIES

Faculty advisor: Skran (government, Edwin N. and Ruth Z. West Professor in Economics and Social Science, chair)

The interdisciplinary area in international studies encourages students to discover the relationships among different societies. It is also intended to heighten their sensitivity to the degree to which cultural-linguistic factors affect perception of the world. The program offers students an opportunity to use skills and perspectives gained from study of modern languages and civilizations to enhance their understanding of international events and developments encountered in their studies in the social sciences and humanities.

Just as interdisciplinary areas (IAs) are intended to provoke students to examine the boundaries between their major fields and closely related fields of study, the interdisciplinary area in international studies is a vehicle through which students may discover and explore the international dimensions of their majors. It is also a means through which a student may demonstrate a commitment to enhanced understanding of those dimensions.

The interdisciplinary area in international studies has an informal, but natural, relationship with the social organization called Lawrence International. Students who participate in the interdisciplinary area should consider seriously membership in Lawrence International and should attend the meetings and functions of the organization. Lawrence International extends a warm welcome to all students and especially to those who evince interest in international matters.

2010-2011 Course Catalog

Required for the interdisciplinary area in international studies

1. One six-unit course in a foreign language beyond the level required for completion of Lawrence's foreign language requirement.
2. Government 140 or Government 150. Students should fulfill this requirement in the freshman or sophomore year. Juniors are discouraged from taking Government 140, and the course is closed to seniors without the consent of instructor.
3. At least four six-unit courses, from at least three different departments, that embody international and/or cross-cultural context and that can be shown by the student to conform to a coherent design, either regional or thematic in nature. The student must present a clear articulation of the design either during a culminating conversation between the student and the Interdisciplinary Area Advisory Committee or in some other suitable context — e.g., an advanced-level seminar in international studies, when such an offering is available.
4. Notification of the faculty advisor by the first Friday of Term III of intention to complete the IA in the current academic year.

INTERNATIONAL STUDIES

Courses

GOVT 140
Introduction to International Relations
An introductory study of the cultural, political, and economic interactions among states and non-state actors in global politics. Special attention is paid to key issues, including international security, foreign policy decision-making, and the role of diplomacy in promoting cooperation. Required for the interdisciplinary area in international studies. Units: 6.

GOVT 150
Introduction to Global Studies
An introduction to the economic, political, social, and cultural aspects of globalization. Special attention will be paid to the influence of globalization on particular regions of the world, including Europe and North America, the former Soviet Union, East Asia, Africa, and Latin America. Emphasis will be placed on the role of cross-cultural diplomacy in a global world. As part of the course, students will participate in a simulation of an international negotiation. Units: 6.

LATIN AMERICAN STUDIES

Faculty advisors: Fares (Spanish), Frederick* (history, chair)

Latin America is the product of one of the most dramatic intersections of human societies in world history. Europeans, Native Americans, and Africans began a process that has created a politically, socially, and economically complex region. Latin America and its peoples have played a vital role in the development of the modern world, and that role is only increasing at the start the 21st century. The minor in Latin American Studies provides students an opportunity to study this field from a variety of disciplinary angles. By employing the tools of various disciplines, including anthropology, Spanish, economics, government, history, and others, students can begin the process of understanding this vast mosaic of peoples and nations.

2010-2011 Course Catalog

Required for the minor in Latin American studies
Students must take six courses (at least 36 units), including:

1. Core requirements: 12 units (normally two courses), from the following list:
    - History 178: *Colonial Latin American History*
    - History 179: *Modern Latin American History 1821-Present*
    - History 371: *The Rise and Fall of American Empires*
    - History 378: *Ethnicity in Latin America* / Ethnic Studies 325: Ethnicity in Latin America
    - History 422: *Revolt and Revolution in Latin America*
    - Spanish 400/Ethnic Studies 480: *Latin American Civilizations and Culture*
    - Spanish 410/Gender Studies 410: *Gender, Politics, and Current Events in Latin America*
    - Spanish 520: *Survey of Latin American Literature I*
    - Spanish 521: *Survey of Latin American Literature II*
    - Spanish 575, 576/Art History 270, 271: *Latin American Visual Art*
2. Electives: 24 units (normally four courses) from at least two of the following categories:
    - From the core course list (in addition to the two courses the students take as core courses):
        - History 178: *Colonial Latin American History*
        - History 179: *Modern Latin American History 1821-Present*
        - History 371: *The Rise and Fall of American Empires*
        - History 378: *Ethnicity in Latin America*
        - History 422: *Revolt and Revolution in Latin America*
        - Spanish 400/Ethnic Studies 480: *Latin American Civilizations and Culture*
        - Spanish 410/Gender Studies 410: *Gender, Politics, and Current Events in Latin America*
        - Spanish 520: *Survey of Latin American Literature I*
        - Spanish 521: *Survey of Latin American Literature II*
        - Spanish 575, 576/Art History 270, 271: *Latin American Visual Art*
    - From the following list:
      Elective courses from other disciplines must allow students to focus their individual work on Latin America, and such work must count for at least 25 percent of the final grade for the course. Course content can change from semester to semester; therefore, when choosing electives, it is the responsibility of the student to speak to the professor to confirm that 25 percent of the graded work can be based on Latin American themes.

LATIN AMERICAN STUDIES

Departments have agreed that students can focus individual work as part of the courses listed below. Courses not included on this list may be used as electives provided they meet the above requirements.

- Anthropology 342: *Medical Anthropology*
- Anthropology 500: *Topics in Anthropology*
- Anthropology 501: *Research Questions in Anthropology*
- Anthropology 510: *Contemporary Debates in Anthropology*
- Anthropology 520: *Topics in Archaeology*
- Art History 270/Spanish 575: *Latin American Visual Art (in English)*
- Art History 552: *Art and Propaganda*
- Economics 200/Government 275: *Economic Development*
- Economics 202: *Global Economic Relations*
- Economics 205: *Topics in International Economics*
- Economics 215: *Comparative Economic Systems*
- Government 245: *Comparative Politics of Less–developed Countries*
- Government 270: *Global Environmental Politics*
- Government 340: *International Politics*
- Government 480: *International Organizations*
- Government 500: *Senior Seminar in Government*
- History 110: *Emergence of the Early Modern World*
- History 205: *Cross-Cultural Contacts in the Early Modern World*
- History 295: *Nationalism in the Modern World*
- History 650: *The Practice of History*
- Spanish 320: *Introduction to Literary texts*
- Spanish 330: *Introduction to Film*
- Spanish 405: *Spanish Civilization and Culture*
- Spanish 546: *Women's Writings*
- Spanish 566: *Hispanic Issues*

- Up to one internship

3. Limitations
   - Only up to six units can be from an independent study or tutorial (550 level).
   - Only up to a maximum of 18 units can be from any single discipline (including cross-listed courses).
   - Only up to a maximum of 18 units can be from the student's major/minor.
   - Only up to two courses can be from under the 200 level.
   - A C average in the minor is required.
   - At least 60 percent of the units must be taken on the Appleton campus.

LATIN AMERICAN STUDIES

Courses

HIST 178
Colonial Latin American History
An introduction to the creation and rule of Colonial Latin America between the 15th and 19th centuries. Emphasis is on the patterns of conquest and cultural encounter, mechanisms of colonial rule, interaction between ethnic groups, and the cultural impact of the colonial experience upon Latin America's peoples. (G&C) Units: 6.

HIST 179
Modern Latin American History, 1821-Present
An introduction to Latin America, from 1821 to the present. Focus is placed on new nations as they struggle to create themselves, and weather the challenges of external influence. Emphasis on how Latin America has developed ethnically, politically, and economically and how these factors affect its position in the world today. (G&C) Units: 6.

HIST 371
The Rise and Fall of American Empires: The Americas, from the Beginnings Through the Conquest
A study of the Aztec, Inca, and Maya civilizations, focusing on cultural and technological development. Additional focus is on pre-columbian cultural succession, imperial expansion of the Aztec and Incan empires, and native participation in the conquest. Units: 6.

Prerequisite: Sophomore standing

HIST 378
Ethnicity in Latin America
Explores the coming together of distinct Native, African, and European ethnicities in Latin America, and the resulting creation of new ethnicities. We examine how race has been understood in Latin American history and how attitudes toward race have fundamentally shaped the history of the region. Units: 6.

Also listed as Ethnic Studies 325

Prerequisite: Sophomore standing; HIST 178 or HIST 179 recommended

HIST 422
Revolt and Revolution in Latin America
This seminar investigates resistance in its many forms in Latin American history. Attention to abstract notions of "revolution" will be complemented by evaluating how particular episodes of violent unrest in Latin America have served as the tools of both the weak and the powerful. (G&C) *Fulfills seminar requirement.* Units: 6.

Prerequisite: Junior standing and HIST 178 or 179, or consent of the instructor

LATIN AMERICAN STUDIES

SPAN 400
Latin American Civilization and Culture
A broad introduction to the culture of the Latin American continent and its relations to North American culture. The course presents Latin American civilization, history, economic and political situation, and diverse culture. Emphasis is placed on high cultural manifestations such as art and literature, as well as on the everyday habits of the people. Recommended for students who plan to participate in one of our study-abroad programs in Latin America. Units: 6.

Also listed as Ethnic Studies 480

Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor

SPAN 410
Gender, Politics, and Current Events in Latin America
A critical analysis of current events in Latin America with a focus on gender and political issues. Through films, magazine articles, fiction, and selected radio and television broadcasts from Latin America, students will study major events that relate and give expression to the cultural mores of Latin Americans within the realm of gender and politics. The course allows students to continue to develop their oral communication skills in the target language and, with a wide range of topics and interests, to work toward an understanding of gender issues and political events that have shaped and transformed Latin America. Units: 6.

Also listed as Gender Studies 410

Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor

SPAN 520
Survey of Latin American Literature I
A study of texts from Pre-Columbian and Spanish-speaking cultures from the 15th to 19th centuries, the period of “discovery writing” of Spanish colonies in Latin America, focusing on development and elaboration of genres and on the search for cultural and political emancipation from Spain. Units: 6.

Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

SPAN 521
Survey of Latin American Literature II
A study of major Latin American writers and literary movements from the period of Independence (ca. 1810) to the 20th century. Units: 6.

Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

SPAN 575
Latin American Visual Art (in English)
The course introduces the cultures of Latin America through a survey of its major movements and artists from the early 19th century to the present. Image-based lectures will be accompanied by discussion of visual and thematically related texts (*i.e.,* biographies, letters, scholarly articles) and carefully selected fragments of videos. Taught in English. Units: 6.

Also listed as Art History 270

SPAN 576
Latin American Visual Art
The course introduces the cultures of Latin America through a survey of its major movements and artists from the early 19th century to the present. Image-based lectures will be accompanied by discussion of visual and thematically related texts (*i.e.,* biographies, letters, scholarly articles) and carefully selected fragments of videos. Taught in Spanish. Units: 6.

Also listed as Art History 271

Prerequisite: One 400-level Spanish course, its equivalent, or consent of the instructor

LINGUISTICS

Professors: Gottfried (Psychology), Ryckman (Philosophy), Ternes (German)
Associate professors: Lanouette (German, chair), Sung (Chinese and Japanese), Williams (Education)

The goal of linguistics is the enrichment of knowledge about the nature, grammar, and history of human language. Linguistics is a theoretical and applied discipline, akin to philosophy, anthropology, and cognitive psychology.

The core areas of linguistic theory are phonology, morphology, syntax, and semantics. A grammar is a system of rules that characterize the phonology, morphology, syntax, and semantics of a natural language. The properties of grammars are the central focus of linguistic theory.

Because language is central to all humanistic disciplines, as well as to several social science areas, it is studied from many points of view. Linguistics itself cannot be said to recognize a single optimal approach to the subject; hence the courses provide a variety of approaches that reflect the diversity of the field.

2010-2011 Course Catalog

Required for the linguistics major

1. Linguistics 150: *Introduction to Linguistics*
2. Four of the following core courses:
    - Linguistics 340: *Introduction to Syntax*
    - Linguistics 350: *Introduction to Phonology*
    - Linguistics 380: *Introduction to Morphology*
    - Linguistics 420: *Topics in Logic*
    - Linguistics 470: *Cognitive Linguistics*
3. Four of the following elective courses (one may be a fifth core course from #2):
    - Computer Science 100: *Exploring Computer Science*
    - Computer Science 150: *Introduction to Computer Science*
    - Linguistics 210: *Language and the Law*
    - Linguistics 265: *Introduction to Japanese Language and Culture*
    - Linguistics 310: *Introduction to East Asian Linguistics*
    - Linguistics 320: *Historical Linguistics*
    - Linguistics 330: *Language and Culture*
    - Linguistics 360: *Second Language Acquisition*
    - Linguistics 370: *Phonetics*
    - Linguistics 375/376: *Spanish Phonetics*
    - Linguistics 377: *Linguistics of the Spanish Language*
    - Linguistics 400: *Philosophy of Language*
    - Linguistics 440: *Comparative Syntax*
    - Linguistics 450: *Psycholinguistics*
    - Linguistics 510: *The Romance Languages and Their Histories*
    - Linguistics 530: *The English Language*
    - Linguistics 190, 390, 590, 690: *Tutorial Studies in Linguistics*
    - Philosophy 150: *Symbolic Logic*
    - Philosophy 410: *Philosophy of Mind*

- Psychology 340: *Cognitive Psychology*

4. One of the following:
   a. Study of two foreign languages, each for three terms (e.g., first-year level)
   b. Completion of the fifth term of one foreign language (e.g., second-year level)
   c. Study of one foreign language for four terms and the completion of an off-campus language program

   Linguistics 199, 399, 599, or 699: *Independent Study in Linguistics*

Required for the linguistics minor

1. Linguistics 150: *Introduction to Linguistics*
2. Two of the following core courses:
   - Linguistics 340: *Introduction to Syntax*
   - Linguistics 350: *Introduction to Phonology*
   - Linguistics 380: *Introduction to Morphology*
   - Linguistics 420: *Topics in Logic*
   - Linguistics 470: *Cognitive Linguistics*
3. Two courses selected from the list of electives, or from the list of core courses (#2).
4. C average in the minor

· Required for the minor in teaching ESL

1. Three courses in Linguistics:
   - Linguistics 150: *Introduction to Linguistics*
   - Linguistics 360: *Second Language Acquisition*
   - Linguistics 530: *The English Language*
2. Two courses in Education:
   - EDST 350: *Ethnicity, Cultural Diversity, and Education*
   - EDUC 565: *Methods, Materials, and Assessment in ESL*
3. C average in the minor

***Senior Experience* in Linguistics**

The *Senior Experience* in the Linguistics Program consists of an Independent Study that may be carried out over one, two, or three terms. Students choose an area of interest and work with a faculty member who does work in that field, or closely related to that field. The Independent Study culminates in a research paper and an oral presentation to faculty and students in the Linguistics Program. Possible venues for presentation include the annual Linguistics Björklunden weekend, the Linguistics Tea, or the Richard A. Harrison Symposium.

Students pursuing double majors are encouraged to find a topic that combines their interests in both fields.

LINGUISTICS

Courses

LING 120
Language and Discrimination
This course examines language as a potential site of social statement and, sometimes, social conflict, particularly with respect to questions of “race” and ethnicity. We will explore language-based discrimination, beliefs about language and language variation, and ways language is used to construct and reflect social identities and social group boundaries. Units: 6.

LING 150
Introduction to Linguistics
Introduction to theory and methods of linguistics: universal properties of human language; phonetic, phonological, morphological, syntactic, and semantic structures and analysis; nature and form of grammar. Units: 6.

LING 210
Language and the Law
An introduction to the field of Forensic Linguistics, the application of linguistics to the language of the law. Topics will include the use of language by various participants in the legal process (judges, lawyers, police, witnesses), the plain-language movement, and the linguist as expert witness. Units: 6.

LING 265
Introduction to Japanese Language and Culture
A survey introducing major characteristics of Japanese language with reference to the structure of Japanese society. Topics include honorifics, use of pronouns, loan words, age and gender differences in the language. The course will also familiarize students with various aspects of traditional and contemporary Japanese culture. Units: 6.

Also listed as Chinese and Japanese 265, East Asian Studies 265

Prerequisite: Sophomore standing; CHJA 112 recommended

LING 310
Introduction to East Asian Linguistics
Survey of genetic, regional, and typological classification of East Asian languages; writing systems for Chinese, Japanese, Korean, and Tibetan languages; descriptive and comparative analyses of phonological, morphological, and syntactic structures of East Asian languages. More than one language may be investigated in detail. Units: 6.

Also listed as Chinese and Japanese 310, East Asian Studies 310

Prerequisite: LING 150 and sophomore standing

LING 320
Historical Linguistics
An introduction to the principles and procedures of historical and comparative linguistics: sound change, genetic classification, reconstruction, language variation, and comparative philology. Emphasis on Indo-European, with particular attention to methodology and the historical development of the discipline itself. Units: 6. Prerequisite: LING 150 or consent of instructor

LINGUISTICS

LING 325
Introduction to Sociolinguistics
This course presents an introduction to sociolinguistics, a discipline within linguistics concerned with the systematic investigation of language in relation to the social world. Topics include language variation and change, social identity and language use, linguistic diversity, and language ideologies. We will also practice methods for collecting and analyzing sociolinguistic data. Units: 6.

Prerequisite: LING 150

LING 330
Language and Culture
An examination of language and other cultural symbolic systems used to formulate and communicate meanings. Attention to social factors in language use, including ethnicity, social class, gender, and the nation-state. Some consideration of the ways that language both reflects and influences people's ways of thinking. Units: 6.

Also listed as Anthropology 330

Prerequisite: One anthropology course or one linguistics course, or consent of instructor.

LING 340
Introduction to Syntax
An introduction to descriptive analysis of morphological and syntactic structures in natural languages with an emphasis on gaining insight into the nature of such structures, rather than on linguistic formalization. Topics include levels of representation, X-bar theory, case theory, thematic roles, the lexicon, grammatical function-changing rules, and head-complement relations. Units: 6.

Prerequisite: LING 150 or consent of instructor

LING 350
Introduction to Phonology
An introduction to the formal study of phonetics, phonemics, and phonological analysis and theory. Topics include stress, syllable structure, tones, metrics, phonotactics, and links between phonology and morphology/syntax; exercises on familiar and unfamiliar languages. Units: 6.

Prerequisite: LING 150 or consent of instructor

LING 360
Second Language Acquisition
This course will introduce various issues in the study of second-language acquisition from different perspectives. Topics will include comparisons to first-language acquisition, factors related to second-language acquisition, and learner strategies. Units: 6.

Prerequisite: LING 150 or consent of instructor

LINGUISTICS

LING 370
Phonetics
An introduction to the science of speech sounds, focusing on descriptive and experimental studies of articulation and speech acoustics. Laboratory demonstrations of speech production, acoustical analysis, and speech synthesis are combined with lecture/demonstrations to relate phonetics research to theories of phonology and language acquisition. Units: 6.

Also listed as Psychology 375

Prerequisite: LING 150, PSYC 340, or consent of instructor

LING 374
Advanced Grammar Studies
In-depth study of grammar, syntax, and composition that builds on concepts learned in the intermediate courses. Problem areas, particularly at the advanced level of the language, are studied systematically. Units: 6.

Also listed as Spanish 345

Prerequisite: SPAN 202, its equivalent, or consent of the instructor.

LING 375
Spanish Phonetics
Spanish Phonetics will immerse students in the pronunciation and general phonetics of the Spanish language as it is spoken in Spain and Latin America. The course will help students to perfect their accent in Spanish and make them aware of the different accents of spoken Spanish. It also will serve Conservatory of Music students who desire to practice their diction in Spanish. Taught in Spanish. Not open to native speakers of Spanish. Units: 6.

Also listed as Spanish 340

Prerequisite: SPAN 202, its equivalent, or consent of the instructor; not open to native speakers of Spanish

LING 376
Spanish Phonetics (in English)
Spanish Phonetics will immerse students in the pronunciation and general phonetics of the Spanish language as it is spoken in Spain and Latin America. The course will help students to perfect their accent in Spanish and make them aware of the different accents of spoken Spanish. It also will serve Conservatory of Music students who desire to practice their diction in Spanish. Taught in English. Not open to native speakers of Spanish. Units: 6.

Also listed as Spanish 341

Prerequisite: Sophomore standing or consent of the instructor

LINGUISTICS

LING 380
Introduction to Morphology
An introduction to morphology, the study of the internal structure of words. Topics include the concept of the morpheme, the structure of words and processes of word formation, inflection versus derivation, and issues in morphological theory. The assignments involve in-depth analyses of data from various languages. Units: 6.

Prerequisite: LING 150

LING 400
Philosophy of Language
An examination of major theories of meaning, reference, and cognitive content and an attempt to understand how language functions to relate “internal” psychological states to things in the “external” world. Contemporary philosophers are emphasized. Units: 6.

Also listed as Philosophy 400

Prerequisite: One course in philosophy, junior standing, or consent of instructor; PHIL 150 recommended

LING 420
Topics in Logic
An investigation of topics selected from among the following: consistency and completeness theorems for both sentential and predicate logic, Gödel’s Incompleteness Theorem, logical paradoxes (Russell’s Paradox, the Liar Paradox, and Newcomb’s Paradox), and modal-tense logic and its formal semantics.

Topic for Winter 2010: Montague Semantics and Theories of Truth

Units: 6.
Also listed as Philosophy 420

Prerequisite: PHIL 150 or consent of instructor

LING 450
Topics in the Psychology of Language
An examination of the nature and structure of language, integrating knowledge from linguistics, psychology, neurophysiology, and sociology. Focus on the psychological theories and experimental evidence about language production and perception. Units: 6.

Also listed as Psychology 540

Prerequisite: PSYC 340, LING 150, or consent of instructor

LINGUISTICS

LING 470
Cognitive Linguistics
Cognitive linguistics is a subfield of linguistics and cognitive science that studies conceptual structure, language, and meaning in relation to general cognitive mechanisms. Topics include cognitive and construction grammars, categorization, construal, image schemas, mental spaces, conceptual metaphors, and conceptual blending. Units: 6.

Prerequisite: LING 150 or consent of instructor

LING 510
The Romance Languages and Their Histories
An introduction to the development of Romance languages from Latin. Emphasis on a comparative study of the structures of the modern Romance languages. Taught in English. Units: 6.

Also listed as Spanish 560, Classics 520

Prerequisite: Knowledge of Latin or a Romance language beyond the intermediate level, or consent of instructor

LING 530
The English Language
A study of the sounds, structure, usage, and history the English language. Units: 6.

Also listed as English 530

Prerequisite: LING 150 and sophomore standing, or consent of instructor

LING 545
Gesture Studies
Gesture studies is an interdisciplinary field that examines the use of the hands and other parts of the body in communication and cognition. In this seminar we discuss studies of gesture types, universals, and variations; gesture development; gesture production and perception; relations of gesture to thought and language (spoken and signed); and functions of gesture in human interaction, problem-solving, and learning. Units: 6.

Also listed as Education Studies 545, Psychology 545

Prerequisite: One course in linguistics or psychology, or consent of the instructor

LING 390, 590, 690
Tutorial Studies in Linguistics
Available to advanced students of linguistics. Units: Variable.

Prerequisite: Counter Registration Required.

LINGUISTICS

LING 191, 391, 591, 691
Directed Study in Linguistics
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

LING 399, 599, 699
Independent Study in Linguistics
Available to advanced students of linguistics. Units: Variable.

Prerequisite: Counter Registration Required.

MATH

Professors: Evans* (chemistry), Parks (Pieper Family Professor of Servant Leadership, chair term II), Pourciau* (chair term III)
Associate professors: Gregg**, Jordan**, Krebsbach, Sanerib** (chair term I)
Assistant professor: Corry**
Visiting assistant professors: Shaw, Wright
Instructor: Clemons

* On leave Term(s) II; ** On leave Term(s) III

Pattern and form surround us — from the branching angles of our blood vessels and the complexity of computer algorithms to inventory scheduling and the four-dimensional geometry of our universe. As the pure expression of pattern and form, mathematics is the language of all science.

In the past 50 years, many disciplines — computer science, statistics, ecology, and management science among them — have been virtually transformed by the infusion of mathematics. Alongside the traditional field of mathematical physics, one now finds new fields such as mathematical biology, mathematical economics, mathematical linguistics, and mathematical psychology.

A mathematics degree could lead to graduate study in any of these fields, as well as in areas in pure and applied mathematics. Moreover, students have found a major in mathematics, with its training in logic, analysis, and precise expression, to be excellent preparation for careers in business, law, or medicine.

To reflect the diversity of modern mathematics and its applications, the department, alone or in conjunction with the economics department, offers three separate majors: mathematics, mathematics-computer science, and mathematics-economics. Core courses provide all majors with a secure foundation for varied and challenging advanced coursework, including possible student-designed tutorials and, in the senior year, a term of independent study.

For non-majors, the department offers a number of elementary- and intermediate-level courses designed to meet the needs of students who require mathematics for further work in their discipline or who wish to satisfy a general education requirement.

In all its courses, from elementary to advanced, the department seeks to instill an understanding of mathematical ideas, an appreciation for mathematical methods and styles, and a sense of excitement at the power and diversity of modern mathematics and its applications.

For a full description of Lawrence's computer facilities and for descriptions of the computer science courses visit the Computer Science Website.

MATH

2010-2011 Course Catalog

Required for the mathematics major

1. Complete or place out of the calculus sequence: Mathematics 140, 150, and 160
2. One of Mathematics 207, 210, or 220
3. One computer science course numbered 110 or above (excluding 170)
4. Mathematics 300 and 310
5. 24 additional units in mathematics courses numbered 400 or above
6. Completion of an independent study project in at least one term of the senior year.
7. In choosing courses beyond the core sequence, students should note that certain advanced courses may be particularly relevant to majors with specific interests or career goals:
    - Pure mathematics: 410, 525, 535, 540, 545, 550, 560, 565, and 600
    - Computer science: 420, 435, 525, 540, and 565
    - Operations research: 410, 420, 435, 440, 445, 525, and 550
    - Applied mathematics: 410, 420, 435, 440, 445, 535, and 550
    - Statistics and actuarial science: 410, 420, 435, 440, 445, and 550
    - Engineering: 410, 420, 435, 440, 535, and 550
    - Secondary teaching: 410, 495, 525, 530, 535, 545, 550, and 600

Required for the mathematics minor

1. Calculus through Mathematics 160
2. Either Mathematics 210 or Mathematics 220
3. Mathematics 300 and Mathematics 310
4. 6 units in any one upper-level mathematics course numbered from 400 to 600, except Mathematics 495
5. C average in the minor

Required for the interdisciplinary mathematics-computer science major

1. The core sequence: Mathematics 140, 150, 160 and Computer Science 150, 250, and 270
2. Mathematics 220 and 300
3. Computer Science 460, 510, and 515
4. 6 additional units in mathematics courses selected from among Mathematics 310, 420, 525, and 540
5. 6 additional units in a computer science course numbered 400 or above
6. 6 additional units in a computer science course numbered 400 or above or selected from among Mathematics 310, 420, 525, and 540
7. Completion of an independent study project prior to the Spring Term of the senior year
8. Computer Science 600 in the senior year

In choosing electives: Mathematics 420 and 525 are recommended. Computer Science 430 or 440 is recommended for students considering a technical career or graduate study in computer science. Computer Science 410 is recommended for those considering careers in management information science. Physics 220 is recommended for students considering pre-engineering.

MATH

Required for the interdisciplinary mathematics-economics major

- The mathematics component of the major is:
    1. Mathematics 140, 150, 160, 207, 300, and 310
    2. Either Mathematics 435 or 445 and 6 units in a mathematics course numbered 400 or above, with 435, 440, 445, or 560 recommended
- The economics component of the major is:
    1. Economics 100 or 120
    2. Economics 300, 320, and 380
    3. Any three six-unit courses numbered between 400 and 580 with Economics 500, 520, and 540 recommended
- The interdisciplinary component of the major is:
    1. Completion of an independent study project that has been approved by both departments.
    2. A major must have an advisor in each department.

Tutorials The department views tutorials as opportunities to enhance its usual course offerings, not duplicate them. In order to reserve tutorials for this purpose, no tutorials are given for courses routinely offered, and the department does not normally permit a tutorial to be used to satisfy any requirement for the major.

First-year courses The department offers two calculus sequences: Mathematics 140, 150, 160 (Calculus I, II, III) and Mathematics 120, 130 (Applied Calculus I, II). Students intending to major in mathematics, mathematics-computer science, mathematics-economics, physics, or chemistry, or any student intending to take advanced mathematics courses, must complete the Calculus I, II, III sequence. Properly prepared students should enter this calculus sequence their freshman year. Proper preparation means strong high school mathematics, including a pre-calculus or elementary functions course, and strong SAT or ACT scores. Students who lack this preparation yet need the three-course sequence should consult their advisor and the mathematics department as soon as possible.

The Applied Calculus I, II sequence does not prepare students for more advanced courses in mathematics but does help prepare students for advanced work in the social and life sciences. This sequence demands less technical proficiency than does the Calculus I, II, III sequence. Good performance in high school mathematics through the junior year should be adequate preparation.

Advanced Placement
Advanced placement in the Calculus I, II, III sequence and up to 12 Lawrence units may be obtained by presenting a score of 4 or 5 on the AB or BC calculus exams administered by the College Board or by performing well on an exemption-credit exam given by the department during Welcome Week. Consult the department for details. Students intending to enter Calculus I should not take the department's exemption-credit exam. Advanced placement and six Lawrence units (for Computer Science 150) may be obtained by scoring 4 or 5 on the A or AB College Board computer science exam. Consult the department for proper placement.

Six Lawrence units (for Mathematics 107) may be obtained by scoring 4 or 5 on the College Board statistics exam. Consult the department for proper placement.

MATH

Off-campus and cooperative programs
Students wishing to combine a liberal arts degree with engineering should consider the 3-2 program in engineering.
The department encourages students to apply to the many Research Experiences for Undergraduates (REU) programs funded by the National Science Foundation; in these summer programs, students are paid to participate in research teams at various campuses throughout the country. Students may also be interested in the Budapest Semester in Mathematics or in one of several other off-campus study options. Department faculty members can provide details.

Course numbering
Typically course numbered below 400 are offered each year, while courses numbered 400 or higher are offered every other year.

***Senior Experience* in Mathematics**
The mathematics department's *Senior Experience* consists of a 6-unit (typically one-term) independent study project completed in the senior year. The project must demonstrate the capacity to learn mathematics (or statistics) independently or to utilize mathematics or mathematical technique as an innovative or substantive part of a larger project.

Interdisciplinary mathematics-economics majors must demonstrate the ability to combine topics in both disciplines — bringing appropriate techniques of mathematics or statistics to bear on the study of economics, or learning mathematics or statistics suggested by economic models
Interdisciplinary mathematics-computer science majors must complete their independent study project in two parts: an independent study in the fall or winter term of the senior year (usually 3 units), followed by a presentation of their results in the winter term Computer Science Senior Seminar (3 units).

For mathematics and mathematics-computer science majors, the project must be approved and supervised by a faculty member in the mathematics department. For mathematics-economics majors, the project must be approved by a faculty member of each department and supervised by a member of one of the departments. Students should consult with departmental members in the spring before their senior year, in order to plan appropriately for their Senior Experience.

MATH

Courses

MATH 105
The Mathematical Experience
An introduction to the scope, power, and spirit of mathematics. Topics, chosen to convey the character of mathematical inquiry, may vary; they include euclidean and non-euclidean geometry, number theory, topology, graph theory, infinity, paradoxes, set theory, and logic. Intended for students with limited preparation in mathematics. Units: 6.

Prerequisite: Sophomore standing

MATH 107
Elementary Statistics
For students in all disciplines. Provides the background needed to evaluate statistical arguments found in newspapers, magazines, reports, and journals and the logic and techniques necessary to perform responsible elementary statistical analysis. Students who have completed a calculus course should elect Mathematics 207 rather than Mathematics 107. This course may not be taken on a Satisfactory/Unsatisfactory basis. Units: 6.

Prerequisite: Sophomore standing. Only one of MATH 107, 117, or 207 may be taken for credit

MATH 117
Elementary Statistics
For students in all disciplines. Provides background needed to evaluate statistical arguments found in newspapers, magazines, reports, and journals and the logic and techniques necessary to perform responsible elementary statistical analysis, including computer-aided data analysis. Winter Term laboratory component emphasizes analysis of social science data sets, and Spring Term laboratory component emphasizes analysis of natural science data sets. Students who have completed a calculus course should elect Mathematics 207 rather than Mathematics 107 or 117. This course may not be taken on a Satisfactory/Unsatisfactory basis. Units: 6.

Prerequisite: Sophomore standing. Only one of MATH 107, 117, or 207 may be taken for credit.

MATH 120
Applied Calculus I
An introduction to calculus that stresses applications to the life and social sciences. Topics include derivatives, integrals, optimization, and exponential and logarithmic functions. Mathematics 120 and 130 do not prepare students for more advanced courses. Units: 6.

Prerequisite: Three years of high school mathematics; MATH 120 and 140 cannot both be taken for credit

MATH 130
Applied Calculus II
Differential and integral calculus in several variables, including optimization, partial derivatives, and multiple integrals. Also applications of integration and an introduction to differential equations. Stresses applications to the life and social sciences. Units: 6.

Prerequisite: MATH 120

MATH

MATH 140
Calculus I
Functions, limits, derivatives, the Mean Value Theorem, definition and properties of integrals, the Fundamental Theorem of Calculus, and applications to related rates, curve sketching, and optimization problems. Placement exam not required. Units: 6.

Prerequisite: Four years of high school mathematics MATH 120 and 140 cannot both be taken for credit

MATH 150
Calculus II
Applications of integration, exponential and logarithmic functions, techniques of integration, infinite sequences and series, and Taylor series. Units: 6.

Prerequisite: Advanced placement, MATH 140, or MATH 120 and consent of instructor

MATH 160
Calculus III
Functions of two or more variables, partial derivatives, chain rules, optimization, vectors, derivatives of vector-valued functions, Lagrange multipliers, multiple integrals, line integrals, and Green's Theorem. Units: 6.

Prerequisite: MATH 150 or advanced placement

MATH 207
Introduction to Probability and Statistics
A survey of statistical methods including their mathematical foundation and their implementations on a computer. Topics include descriptive statistics and graphs, simple linear regression, random variables and their distributions, conditional probability, independence, sampling distributions, the Central Limit Theorem, and parametric and nonparametric tests of hypotheses. Laboratory component emphasizes analysis of economic data sets. Units: 6.

Prerequisite: MATH 120 or 140. Only one of MATH 207, 107, or 117 may be taken for credit

MATH 210
Differential Equations with Linear Algebra
A study of differential equations and related techniques in linear algebra. Topics include first-order equations and their applications, existence and uniqueness of solutions, second-order linear equations and their applications, series solutions, systems of first-order equations, vector spaces and dimension, linear transformations, and eigenvalues. Units: 6.

Prerequisite: MATH 160, or MATH 150 and consent of instructor

MATH

MATH 217
Applied Statistical Methods
A second course in statistics that covers analyses needed to solve more complicated data-driven problems. Time permitting, topics include multiple regression, analysis of variance, nonparametric tests, bootstrap methods, permutation tests, and categorical data analysis. Computer lab component is used to investigate real data using statistical software. Units: 6.

Prerequisite: AP examination credit in statistics, MATH 107, MATH 117, or MATH 207

MATH 220
Applied Combinatorics
An introduction to logic, proofs by mathematical induction, and elementary combinatorics. Additional topics include recurrence relations, generating functions, and the principle of inclusion-exclusion. Units: 6.

Prerequisite: MATH 150

MATH 300
Foundations of Algebra
An introduction to the rigorous study of mathematics. Topics include elementary theory of sets and mappings, number theory, equivalence relations, finite groups, homomorphisms, quotient groups, and rings. Units: 6.

Prerequisite: MATH 207, 210, or 220

MATH 310
Foundations of Analysis
A study of the concepts that underlie mathematical analysis: the completeness of the real numbers, convergence, continuity, derivatives, integrals, infinite series, and, if time permits, an introduction to metric spaces or Fourier series. Units: 6.

Prerequisite: MATH 300

MATH 400
Partial Differential Equations
A survey of techniques used in modeling physical systems, with particular emphasis on partial differential equations and methods used to attack problems that do not have clean or simple solutions. Topics include techniques for solving partial differential equations exactly, the Fourier transform, perturbation theory, variational methods, Monte Carlo techniques, and finite difference schemes. Units: 6.

Prerequisite: MATH 300 or consent of instructor

MATH 410
Linear Algebra
A study of vector spaces, linear transformations, and their representations. The focus will be on algebraic and coordinate-free methods, and topics will include dimension, dual spaces, determinants, canonical forms, inner product spaces, and the spectral theorem. Units: 6.

Prerequisite: MATH 300

MATH 420
Numerical Analysis
Computer approximated (numerical) solutions to a variety of problems with an emphasis on error analysis. Interpolation, evaluation of polynomials and series, solution of linear and non-linear equations, eigenvectors, quadrature (integration), and differential equations. Units: 6.

Prerequisite: MATH 300 and CMSC 110 or CMSC 150

MATH 435
Optimization
The study of local and global maximums and minimums of function, given various sorts of constraints. Linear problems and the simplex algorithm, general non-linear problems and the Kuhn-Tucker conditions, convex problems. Perturbation of problem parameters and duality. Applications to a wide variety of fields, including economics, game theory, and operations research. Units: 6.

Prerequisite: MATH 310

MATH 440
Probability Theory
The mathematics of chance: probability, discrete and continuous random variables and their distributions, moments, jointly distributed random variables, conditional distributions, the Central Limit Theorem, and weak and strong convergence. Units: 6.

Prerequisite: MATH 310

MATH 445
Mathematical Statistics
The development and study of statistical theory. Topics include sampling distributions, point and interval estimation, significance tests, bootstrap methods and permutation tests, analysis of variance, and, time permitting, regression analysis and non-parametric methods. The computer-lab component is used to analyze real-world case studies and to investigate computer-intensive statistical methods. Units: 6.

Prerequisite: MATH 310 and MATH 440

MATH 495
Teaching Seminar
A seminar on teaching mathematics intended for students seeking secondary certification. Practice with and advice on lecture, small group, and one-on-one situations. Outside readings on the philosophy and techniques of teaching mathematics, professional standards, curriculum issues, and resources. Units: 2.

MATH 525
Graph Theory
A survey of graph theory that balances the abstract theory of graphs with a wide variety of algorithms and applications to “real world” problems. Topics include trees, Euler tours and Hamilton cycles, matchings, colorings, directed graphs, and networks. Units: 6.

Prerequisite: MATH 300

MATH 530
Topics in Geometry
The axiomatic development of euclidean and non-euclidean geometry, including the historical and philosophical issues raised by the “non-euclidean revolution.” Additional topics, such as projective or differential geometry and convexity, may be included. Units: 6.

Prerequisite: MATH 300

MATH 535
Complex Analysis
An introduction to functions of a complex variable, the Cauchy-Riemann equations, conformal mappings, Cauchy’s theorem, Cauchy’s integral formula, Taylor and Laurent series, and a sampling, as time and interest permit, of the corollaries to Cauchy’s theorem. Units: 6.

Prerequisite: MATH 310

MATH 540
Mathematical Logic and Set Theory
Establishes the basic syntactical tools needed to develop the semantics of first-order logic with equality, including the completeness and compactness theorems. Axiomatic set theory is developed culminating with the Axiom of Choice, some equivalents, and the Continuum Hypothesis. Units: 6.

Prerequisite: MATH 300

MATH 545
Rings and Fields
Modern algebra with topics selected from group theory, ring theory, field theory, classical geometric construction problems, and Galois theory. Emphasis on the use of mathematical abstraction to illuminate underlying relationships and structure. Units: 6.

Prerequisite: MATH 300

MATH 550
Topics in Analysis
Selected topics in analysis covering a wide variety of spaces and leading to applications of classical importance. In recent years, topics have included fixed point theory, inverse and implicit function theorems, abstract theory of differential equations, Lebesgue measure and integration, Fourier series and transforms. Units: 6.

Prerequisite: MATH 310

MATH 560
Topology
A study of metric and topological spaces, including continuity, compactness, connectedness, product and quotient spaces. Additional topics may include Zorn’s Lemma, separation properties, surfaces, the fundamental group, and fixed point theorems. Units: 6.

Prerequisite: MATH 310

MATH 565
Number Theory
A study of the integers, including unique factorization, congruences, and quadratic reciprocity. Other topics may include finite fields, higher reciprocity laws, and algebraic number theory. Units: 6.

Prerequisite: MATH 300

MATH 600
History of Mathematics
A study of the history of mathematics from the ancient Greeks through the present, emphasizing the role of mathematics in scientific advances, the work of great mathematicians, and the modern branching of the subject into a multitude of specialties. Units: 6.

Prerequisite: MATH 310

MATH 390, 590, 690
Tutorial Studies in Mathematics
Advanced work in mathematics on topics not covered in regular offerings. Units: Variable.

Prerequisite: Counter Registration Required.

MATH 191, 391, 591, 691
Directed Study in Mathematics
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

MATH 399, 599, 699
Independent Study in Mathematics
Guided independent study of an advanced topic in undergraduate mathematics or supervised work on an undergraduate research project, generally culminating in a final presentation and/or paper. Units: Variable.

Prerequisite: Counter Registration Required.

MUSIC

Students in the Bachelor of Arts degree program may major or minor in music (see below). The Conservatory of Music section of this catalog lists courses for all programs in music. Opportunities for the study of music and for participation in Lawrence University ensembles are available to qualified university students regardless of major.

2010-2011 Course Catalog

Required for the music major
90 units in music, to include:

1. Music theory: 30 units: MUTH 151, 161, and 171 or 201, 211, and 221; 152, 162, and 172 or 202, 212, and 222; 251, 261, and 271; 252, 262, and 272; 301, 311, and 321
2. Music history: 18 units: MUHI 201, 202 (12 units); 6 units in courses numbered 400 or above.
3. Performance:
    a. 18 units minimum of applied individual instruction. 6 consecutive terms of study are required.
    b. 5 units: MURP 271, 272, 273, 274, 275 for students whose primary instrument is voice
    c. Students must complete a qualifying examination by the end of the sophomore year.
    d. Students must participate in either individual or ensemble performance study in each term in which they are in residence on the Appleton campus.
4. Ensemble: 6 units minimum of ensemble performance study. A maximum of 9 units of ensemble performance study may apply to the major.
5. Keyboard skills: 3 units MURP 201, 202, 203 or 2 units MURP 301, 302 or demonstrated proficiency.
6. Additional electives in music to total 90 units
7. An approved lecture, lecture/recital, or senior project must be presented during the last three terms of study at Lawrence.

Please refer to the Conservatory Handbook and departmental handbooks for other regulations and information on the major in music. In addition to the 90 units maximum in music, students must complete 126 units in disciplines other than music, including all requirements for the B.A. degree (see "Degree and General Education Requirements").

MUSIC

Required for the music minor

1. Music theory: 18 units: MUTH 151, 161, and 171 or 201, 211, and 221; 152, 162, and 172 or 202, 212, and 222; 251, 261, and 271
2. Music history: 12 units: MUHI 201, 202
3. Performance: MUIN (Applied Individual Instruction) 9 units and 3 terms of study
4. Ensemble: MUEN (Ensemble Performance Study): 3 units and 3 terms participation
5. Keyboard skills: 3 units: MURP 201, 202, 203 or 2 units: MURP 301, 302 or demonstrated proficiency
6. C average in the minor

***Senior Experience* in Music**
Candidates for the Bachelor of Arts with a major in music are required to present a lecture, lecture/recital, recital, or senior project during the last three terms at Lawrence. Students in this program are encouraged to consult their advisers early in the junior year. If a recital is performed, it is subject to the regulations administered by individual applied areas as described above. For other projects, a proposal must be submitted and approved by the B.A. in Music Committee.

The following are guidelines to apply to the other projects that must be approved by the B.A. in Music Committee.

1. The proposal for the project should be submitted in writing
2. The initial proposal should be submitted no later than week 8 of the term prior to the one during which the project will be completed
3. The project proposal should state in specific detail exactly what the project entails and exactly what the student will do to complete it. The proposal should also briefly indicate how such a project builds on the student's prior experiences at Lawrence, and why it may be a logical conclusion to his or her music major
4. In general, this project should not simply comprise work the student has done for any course, but instead it should involve some work done beyond and outside of the prescribed curriculum for the music major. In some instances, work done for an elective independent study (e.g., not one used to satisfy a curricular requirement) may be acceptable
5. Final approval of the proposal should be obtained by the end of the term prior to the one during which the project will be completed
6. All projects must include some formally written component. This may, in some instances, simply serve as a relatively brief context for projects that do not essentially comprise written work (e.g., recordings, radio or television broadcasts, films or videos, multi-media installations, manufacture of musical instruments, etc.)
7. Though interdisciplinary projects are encouraged, the theory, history, or practice of music still should be a major focus of all acceptable proposals. For example, "the effects of performance anxiety on the human digestive system's would be a biology project, and would not be acceptable; on the other hand, "effective strategies for coping with performance anxiety's could be perfectly acceptable (even if it deals largely with discussions of what one should or should not ingest prior to a performance)
8. Once the project has been completed, a Lawrence Conservatory faculty member should certify that the project has met a minimum satisfactory standard of quality

MUSIC

Other opportunities
All courses in music may be elected by any qualified Lawrence student. Ensembles are open to university students by audition. Private instruction (Applied Music Individual Instruction) is available by permission of the instructor, based on audition or interview and faculty schedules. A fee for private lessons and the use of practice facilities is charged to non-music majors as follows:

- ½ hour per week: $275 per term
- 1 hour per week: $500 per term

A student may drop private instruction prior to the end of the second week of the term. A refund may be obtained for the remainder of the term, provided the registrar and the conservatory office are officially notified of the change in registration. Refunds are not provided after the second week of the term.

INTERDISCIPLINARY MAJOR IN THE NATURAL SCIENCES

The interdisciplinary major in the natural sciences enables students to construct science majors around subject areas that bridge two or more disciplines in the natural sciences, leading to graduate work and/or careers in many of the rapidly growing interdisciplinary fields developing along interfaces between the traditional natural sciences.

The interdisciplinary major in the natural sciences requires a primary concentration in biology, chemistry, geology, or physics and a secondary concentration in another of these sciences. Students interested in this major should seek advice form the department of primary interest in order to design a major consistent with both their interests and the requirements of the major. Previous interdisciplinary combinations of biology and chemistry have been replaced by the Biochemistry major.

2010-2011 Course Catalog

Requirements for the interdisciplinary major in the natural sciences in a primary discipline and a secondary discipline

1. Introductory Requirement: An introductory sequence in physics and two additional introductory sequences chosen from those in biology, chemistry, and geology so that sequences in both the primary and the secondary disciplines are included. The introductory sequences are:
    - **Biology:** Biology 110 and 120 or Biology 110 and 140
    - **Chemistry:** Chemistry 115 and 116 or Chemistry 119 or equivalent
    - **Geology:** Geology 110 (any section) and Geology 210
    - **Physics:** Physics 151 and 160 or, with the permission of both the primary and the secondary departments, Physics 141 and 151
2. Intermediate/Advanced Requirement: At least ten six-unit courses in the sciences (biology, chemistry, geology, physics) numbered 200 or above, with at least five in the primary discipline and at least three in the secondary discipline. More specific course and/or laboratory requirements may apply in specific departments.
3. Participation in a senior seminar series as defined by the department of the primary discipline.
4. More specific course and/or laboratory requirements and restrictions apply in specific departments.

NEUROSCIENCE

Faculty advisors: Hetzler (psychology, chair), M. Jenike (anthropology), Wall (biology)

Neuroscience unites biology, chemistry, and psychology in a quest to understand the nervous system. Students participating in the program may include those interested in medicine, veterinary medicine, nursing, and graduate study in neuroscience. This program, however, also serves those whose primary interest is the elusive and alluring question of how the brain works. An important feature of our program is the wide range of laboratory facilities available, and students are encouraged to engage in neuroscience research in collaboration with the faculty.

2010-2011 Course Catalog

Required for the interdisciplinary area in neuroscience

1. The following core courses:
    - Biology 110: *Integrative Biology: Principles*
    - Biology 140: *Integrative Biology: Heterotrophs*
    - Biology 242: *Comparative Physiology*
    - Chemistry 115 and 116: *Principles of Chemistry*
    - Psychology 360: *Brain and Behavior I*
    - Psychology 530: *Brain and Behavior II*
2. At least one course outside the student's major department from the following group:
    - Anthropology 140: *Biological Anthropology*
    - Biology 240: *Morphogenesis of the Vertebrates*
    - Biology 354: *Molecular Biology*
    - Biology 444 or Chemistry 340: *Biochemistry*
    - Biology 453: *Developmental Biology*
    - Chemistry 250 and 252: *Organic Chemistry I and II* (both courses must be taken to fulfill the requirement)
    - Mathematics 107 or 117: *Elementary Statistics* or 207: *Introduction to Probability and Statistics*
    - Psychology 350: *Psychopharmacology and Behavior*
    - Psychology 370: *Perception*
    - Psychology 380: *Learning and Conditioning*
3. Biology 340/Psychology 580/Anthropology 580: *Topics in Neuroscience*

NEUROSCIENCE

Courses

BIOL 110
Integrative Biology: Principles
An introduction to the unified science of life. Emphasis on the experimental approach, to show the interrelationships of living things by examining their metabolism, growth and development, genetics, behavior, ecology, and evolution. Lecture and laboratory. Units: 6.

Prerequisite: Permission of the department chair required to register

BIOL 140
Integrative Biology: Heterotrophs
An introduction to the biology of animals and arotrophic microbes and protists, including studies of the phylogeny, morphology, physiology, development, behavior, and ecology of representatives of the major phyla. Lecture and laboratory. Units: 6.

Prerequisite: BIOL 110; permission of the department chair required to register

BIOL 240
Morphogenesis of the Vertebrates
An integrated lecture and laboratory course that undertakes the study of the structure and function of vertebrate organ systems through examination of morphology. Vertebrate ontogeny, phylogeny, and anatomy are addressed. Units: 6.

Prerequisite: BIOL 140

BIOL 242
Comparative Physiology
A comparative study of the variety of solutions and adaptations diverse animals can make to similar problems — obtaining and transporting oxygen, maintaining water and salt balance, utilizing food, movement, and nervous and hormonal integration. Lecture and laboratory. Units: 6.

Prerequisite: BIOL 140

NEUROSCIENCE

BIOL 340
Topics in Neuroscience
A study of the nervous system from the perspectives of psychology, biology, and/or biological anthropology. Topics vary year to year and may include glial cells, neural development, and the evolution of nervous systems and neurotransmitter systems. Lecture only. May be repeated with consent of instructor.

Topic for Winter 2011: Evolutionary Perspectives on Human Brain and Cognition
This course will consider the human brain and human cognition through the analysis of comparative studies of great apes, the fossil record of human brain evolution, evolutionary genetic evidence, and adaptationist approaches. We will seek to develop a critical understanding of recent findings, in the light of past research.

Units: 6.
Also listed as Psychology 580, Anthropology 580

Prerequisite: CHEM 116 or 119 and either BIOL 140 and one course in psychology, or PSYC 360 and one course in biology, or consent of instructor

BIOL 354
Molecular Biology
An interdisciplinary examination of regulatory mechanisms leading to differential gene expression. Main topics include transcription, translation, gene and protein structure, and modern genomics. The application of current molecular techniques is emphasized throughout the course. Laboratory work is experimental in approach. Lecture and laboratory. Units: 6.

Prerequisite: Sophomore standing, BIOL 110, and CHEM 115

BIOL 453
Developmental Biology
An experimental approach to animal development with laboratory and lecture emphasis on the molecular and cellular level. Includes discussions of pattern formation, differentiation, cell interactions, gametogenesis, fertilization, and early embryogenesis. Lecture and laboratory. Units: 6.

Prerequisite: BIOL 140; concurrent enrollment in or completion of one of the following: BIOL 241, 444 (or CHEM 340), 351 or 354

CHEM 115
Principles of Chemistry: Structure and Reactivity
Introduction to the basic principles of chemistry, emphasizing structures of chemical species (atoms, ions, and molecules), stoichiometry, the relationships between structure and reactivity, basic chemical models (gas laws, *e. g.*) and laboratory skills. This course will serve primarily to prepare students who have not had any previous (high school) coursework in chemistry for CHEM 116. Three lectures and one laboratory session each week. Students with high school chemistry should normally take 116 instead of this course. Please see the chemistry department's web page for placement examination information. Units: 6.

Prerequisite: Placement examination

NEUROSCIENCE

CHEM 116
Principles of Chemistry: Energetics and Dynamics
Introduction to the study of chemistry, for students who have taken high school chemistry or CHEM 115, emphasizing structural and quantitative models of chemical behavior. Topics include bonding, thermochemistry, equilibrium, kinetics, and related applications. Three lectures and one laboratory per week. Enrollment is determined by placement examination. Please see the chemistry department's web page for placement examination information. Units: 6.

Prerequisite: Placement examination

CHEM 250
Organic Chemistry I
A study of carbon compounds, with hydrocarbons discussed in detail and some of the major functional groups introduced. Lectures and weekly laboratory. Laboratory session directed toward the synthesis and analysis of organic compounds and the elucidation of reaction mechanisms. Units: 6.

Prerequisite: CHEM 116 or 119 or consent of instructor

CHEM 252
Organic Chemistry II
A continuation of the study of carbon compounds, including additional functional groups and polyfunctional compounds. One four-hour laboratory per week, directed toward more advanced synthetic and analytic problems. Units: 6.

Prerequisite: CHEM 250

MATH 107
Elementary Statistics
For students in all disciplines. Provides the background needed to evaluate statistical arguments found in newspapers, magazines, reports, and journals and the logic and techniques necessary to perform responsible elementary statistical analysis. Students who have completed a calculus course should elect Mathematics 207 rather than Mathematics 107. This course may not be taken on a Satisfactory/Unsatisfactory basis. Units: 6.

Prerequisite: Sophomore standing. Only one of MATH 107, 117, or 207 may be taken for credit

MATH 117
Elementary Statistics
For students in all disciplines. Provides background needed to evaluate statistical arguments found in newspapers, magazines, reports, and journals and the logic and techniques necessary to perform responsible elementary statistical analysis, including computer-aided data analysis. Winter Term laboratory component emphasizes analysis of social science data sets, and Spring Term laboratory component emphasizes analysis of natural science data sets. Students who have completed a calculus course should elect Mathematics 207 rather than Mathematics 107 or 117. This course may not be taken on a Satisfactory/Unsatisfactory basis. Units: 6.

Prerequisite: Sophomore standing. Only one of MATH 107, 117, or 207 may be taken for credit.

NEUROSCIENCE

MATH 207
Introduction to Probability and Statistics
A survey of statistical methods including their mathematical foundation and their implementations on a computer. Topics include descriptive statistics and graphs, simple linear regression, random variables and their distributions, conditional probability, independence, sampling distributions, the Central Limit Theorem, and parametric and nonparametric tests of hypotheses. Laboratory component emphasizes analysis of economic data sets. Units: 6.

Prerequisite: MATH 120 or 140. Only one of MATH 207, 107, or 117 may be taken for credit

PSYC 350
Psychopharmacology and Behavior
An interdisciplinary examination of the ways in which behaviorally active drugs exert their effects, drawing on research in pharmacology, psychology, biochemistry, anatomy, and neurophysiology. Provides an understanding and appreciation of the role of behaviorally active drugs in people's lives, today and in the past. Units: 6.

Prerequisite: Sophomore standing

PSYC 360
Brain and Behavior I
An introduction to the structure and function of the nervous system and its relationship to behavior. Topics include cellular physiology, neuroanatomy, sensory processes, motor control, and neuropharmacology. No laboratory. Units: 6.

Prerequisite: Sophomore standing; at least one biology course recommended

PSYC 370
Perception
An introduction to the physiological and psychological processes by which we receive, transform, and use the information from the world acquired through our senses. Special emphasis on visual and auditory perception to allow a more in-depth study of two perceptual systems and to provide information useful to those interested in the visual arts and music. Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 380
Learning and Conditioning
An investigation of the basic principles of learning, including classical conditioning, operant conditioning, punishment, biological constraints on learning, and behavior modification. One laboratory per week involving animal learning experiments. Units: 6.

Prerequisite: PSYC 100 and sophomore standing, or consent of instructor; PSYC 280 and 281 recommended

NEUROSCIENCE

PSYC 530
Brain and Behavior II
An examination of interrelationships between the brain and behavior. Topics include sleep, language, motivation, emotion, learning, and mental disorders. One laboratory per week on basic neuroscience techniques. Units: 6.

Prerequisite: PSYC 360

PHILOSOPHY

Professors: Dreher (Lee Claflin-Robert S. Ingraham Professorship in Philosophy, chair), Ryckman
Associate professor: Boleyn-Fitzgerald (Edward F. Mielke Professorship in Ethics in Medicine, Science, and Society)
Post-doctoral fellow: Hanna (Uihlein Fellow of Ethics)

Opportunities for non-majors

Courses in philosophy develop skills in reading and thinking analytically and critically and in cogent argumentation. In addition, they provide students with invaluable insights into many of the major intellectual issues confronting Western civilization.

Many students find that such work in two or three philosophy courses significantly enhances the intellectual quality of their efforts in their own fields. We urge students to discuss the matter with any member of the philosophy department and with their own major advisors.

Philosophy department faculty members will gladly discuss with majors and potential majors the specific ways in which their work can best prepare them for careers in academe, business, government, law, and medicine, among others.

Note that, with the consent of the instructor, students may take an intermediate course in philosophy without having taken an introductory course. (Intermediate courses are numbered 200 through 399. Courses numbered 400 through 699 are advanced courses.)

The philosophy major

Students are introduced to philosophy through a study of logic or through a course in which substantive problems are raised by an examination of selected writings of some important philosophers. Students may continue their study through a variety of courses in the history of philosophy, in the systematic study of traditional problem areas within philosophy, and in the philosophical examination of other disciplines.

The historical courses enable students to become familiar with the thinking of the most influential philosophers in our tradition and with the historical contexts in which they worked. The systematic courses encourage students to confront contemporary statements of central philosophical questions and to investigate some of the more promising answers to them. The courses engaged in the philosophical examination of other areas encourage students to bring methods of philosophical analysis to bear on the methods and presuppositions of other areas of inquiry.

PHILOSOPHY

2010-2011 Course Catalog

Required for the philosophy major
A student majoring in philosophy is required to take a minimum of nine six-unit philosophy courses. Those nine courses will include:

1. A minimum of eight courses numbered above 149
2. Philosophy 150 or 420 (Majors are strongly encouraged to satisfy this requirement early in their careers.)
3. At least three courses from Philosophy 200, 210, 220, 230, 240 (including at least two from Philosophy 200, 210, 220)
4. At least one course from Philosophy 300, 310, 330, 400, 410
5. At least one course from Philosophy 320, 350, 360, 370, 430, 440
6. Philosophy 600

Advanced students of philosophy are invited to do tutorial and honors work independent of the course requirements.

Required for the philosophy minor

- Five six-unit courses in philosophy, at least two of which must be in the history of philosophy (Philosophy 200, 210, 220, 230, 240) and at least two of which must be from among courses numbered 200 or above but not among Philosophy 200-240.
- Students pursuing a minor in philosophy are encouraged to choose a member of the philosophy department as an informal advisor.
- A C average in the minor is required.

***Senior Experience* in Philosophy**
The Department of Philosophy's *Senior Experience* is PHIL 600, Studies in Philosophy. This is an advanced seminar (the topic for which varies from year to year) in which students critically analyze each other's original research.

Courses

PHIL 100
Introduction to Philosophy: Problems
An introduction to philosophical analysis and intensive study of selected philosophical classics. Topics include the existence of God, the problem of evil, problems of knowledge, the relationship between mind and body, free will, determinism, and moral obligation. Recommended for freshmen and sophomores. Units: 6.

Prerequisite: Recommended for freshmen and sophomores

PHILOSOPHY

PHIL 110
Business Ethics
An introduction to ethical issues that arise in the practice of business. Topics include professional virtues, regulation, employer and employee rights, and social responsibility. Students are required to complete a community service project as part of this course. Units: 6.

Prerequisite: Recommended for freshmen and sophomores

PHIL 120
Applied Ethics: Introduction to Biomedical Ethics
The course will examine moral dilemmas created or intensified by recent advances in medical technology and study ways of analyzing those dilemmas to make them more tractable. We will focus on examples such as euthanasia and the right to die, abortion, behavior modification, allocation of scarce medical resources, *in vitro* fertilization, genetic screening and engineering, and human experimentation. Units: 6.

Also listed as Biomedical Ethics 120

Prerequisite: Recommended for freshmen and sophomores

PHIL 130
Meditation and Virtue: Contemplative and Analytic Perspectives on Character
This course focuses on different theories of the good and of the virtues that lead to a good life. It covers a variety of readings that discuss the good and the good life and also critically examines a variety of meditations designed to cultivate moral virtues. Requirements for the class include writing two papers and undertaking a daily meditation practice. Units: 6.

Prerequisite: Recommended for freshmen and sophomores

PHIL 140
Introduction to Philosophy: Knowing and Valuing
Is there a plausible distinction between (real!) knowing and (mere!) opinion? Can we make any warranted claims about how humans might best lead meaningful lives? We will carefully analyze the responses to such questions offered by Plato and by two 20th-century philosophers. Units: 6.

Prerequisite: Recommended for freshmen and sophomores

PHIL 150
Symbolic Logic
Formal study of the notions of validity, consistency, and equivalence in the languages of sentential logic and predicate logic, plus an introduction to semantics for these languages. Units: 6.

Prerequisite: Recommended for freshmen and sophomores

PHILOSOPHY

PHIL 200
History of Philosophy: Plato and Aristotle
An examination of themes in selected classical Greek tragedies and their development in the philosophies of Plato (*The Republic, Gorgias*) and Aristotle (*Nicomachean Ethics*). Units: 6.

Prerequisite: One course in philosophy, sophomore standing, or consent of instructor

PHIL 210
History of Philosophy: Descartes and Locke
A historical and textual examination of 17th- and 18th-century European philosophers, especially Descartes and Locke, as they address questions such as: What is mind? What is matter? Is there a God? Units: 6.

Prerequisite: One course in philosophy, sophomore standing, or consent of instructor

PHIL 220
History of Philosophy: Berkeley, Hume, Kant, and Mill
An examination of selected works of 18th- and 19th-century philosophers. Epistemology, metaphysics, and ethics are emphasized. Units: 6.

Prerequisite: One course in philosophy, sophomore standing, or consent of the instructor.

PHIL 230
History of Philosophy: Early Analytic Philosophy
An examination of the early 20th-century works of G. E. Moore and Bertrand Russell against the background of the then-dominant Hegelian Idealism. Units: 6.

Prerequisite: One course in philosophy, sophomore standing, or consent of instructor

PHIL 240
History of Philosophy: The American Pragmatists
An examination of the attempts by pragmatists such as C. S. Peirce, William James, and John Dewey to reconceptualize “traditional” issues in Western philosophy. Units: 6.

Prerequisite: One course in philosophy, sophomore standing, or consent of instructor

PHIL 270
British Empiricists
An introduction to the philosophy of Locke, Berkeley and Hume. Topics which will be covered include the theory of ideas, experience and observation, realism, idealism and skepticism. Units: 6.

Prerequisite: One course in philosophy, sophomore standing, or consent of the instructor

PHILOSOPHY

PHIL 300
Epistemology
An examination of some basic questions concerning the nature and extent of human knowledge, focusing on the topics of skepticism, justification, certainty, the *a priori* and the *a posteriori,* and analyses of knowledge. Units: 6.

Prerequisite: One course in philosophy, junior standing, or consent of instructor

PHIL 310
Metaphysics
An examination of some central philosophical questions about reality, such as: What basic kinds of things are there? Is truth always and only relative to a conceptual scheme? What is the nature of necessity and possibility? What is the nature of change over time? Units: 6.

Prerequisite: One course in philosophy, junior standing, or consent of instructor

PHIL 320
Ethics
An examination of theories about how we should live. Issues include the role of rights, duties, and virtues in decision making, the scope of morality, the limits of our obligations to others, and the foundations of morality. Units: 6.

Prerequisite: One course in philosophy, junior standing, or consent of instructor

PHIL 340
Philosophy of Art
An examination of major theories of the essence of art, of the major 20th-century critique of the thesis that art has an essence, and of recent attempts to analyze art in light of the critique. Units: 6.

Prerequisite: One course in philosophy, junior standing, or consent of instructor

PHIL 350
Political Philosophy
A seminar examining one topic in political philosophy, typically either distributive justice or war. If the topic is distributive justice, the focus is on different accounts of the just distribution of social benefits and burdens. Issues include the right to health care and other social goods, as well as accounts of the ideals of equality, liberty, and community. If the topic is war, the focus is on political and moral dilemmas of warfare. Issues include war crimes, nuclear deterrence, the status of non-combatants, the use of economic sanctions, and terrorism. Units: 6.

Prerequisite: One course in philosophy, junior standing, or consent of instructor

PHILOSOPHY

PHIL 360
Environmental Ethics
An examination of some ethical assumptions that might figure in discussions of environmental policy by economists, legal experts, philosophers, and policy scientists. Units: 6.

Also listed as Environmental Studies 360

Prerequisite: One course in economics, government, or philosophy; junior standing; or consent of instructor

PHIL 370
Advanced Studies in Bioethics
A seminar examining one particular issue or set of issues in bioethics. Units: 6.

Also listed as Biomedical Ethics 370

Prerequisite: PHIL 120 or two courses in philosophy

PHIL 380
Ethics of Technology
This course focuses on ethical issues that arise from the development of new technology. Specific topics may include artificial intelligence, information technologies, human enhancement, transhumanism, transgenesis, ectogenesis, nanoethics, and neuroethics. Units: 6.

Also listed as Biomedical Ethics 380

Prerequisite: One course in philosophy, junior standing, or consent of the instructor

PHIL 400
Philosophy of Language
An examination of major theories of meaning, reference, and cognitive content and an attempt to understand how language functions to relate “internal” psychological states to things in the “external” world. Contemporary philosophers are emphasized. Units: 6.

Also listed as Linguistics 400

Prerequisite: One course in philosophy, junior standing, or consent of instructor; PHIL 150 recommended

PHIL 410
Philosophy of Mind
An examination of our common sense conception of mental states and processes and of attempts to answer the question, “Is our common sense conception of mental states and processes compatible with the methods and assumptions of cognitive science?” Units: 6.

Prerequisite: One course in philosophy, PSYC 340, junior standing, or consent of instructor

PHILOSOPHY

PHIL 420
Topics in Logic
An investigation of topics selected from among the following: consistency and completeness theorems for both sentential and predicate logic, Gödel's Incompleteness Theorem, logical paradoxes (Russell's Paradox, the Liar Paradox, and Newcomb's Paradox), and modal-tense logic and its formal semantics. Units: 6.

Also listed as Linguistics 420

Prerequisite: PHIL 150 or consent of instructor

PHIL 430
Philosophy of Law
An exploration of questions such as: To what extent may a decision in a legal controversy be deemed uniquely correct (as contrasted with an exercise of the judge's discretion)? What purposes and assumptions underlie branches of the law such as criminal law or torts? What are the functions of precedent? What are the various relationships between morality and the law? Units: 6.

Prerequisite: One course in philosophy, junior standing, or consent of instructor

PHIL 440
Morality, Rationality, and Self-Interest
If acting morally conflicts with my long-term self-interest, what is it rational for me to do? Why be moral? Units: 6.

Prerequisite: One course in philosophy, junior standing, or consent of instructor

PHIL 600
Studies in Philosophy
Topic for Spring 2011: The Scope of Morality This course will focus on questions about moral status. Toward what kinds of things can we have moral obligations? Controversial subjects include fetuses, infants, nonhuman animals, PVS patients, brain-dead humans, conscious robots, non-sentient life, ecosystems, corporations, organizations, and nation-states. Units: 6.

Prerequisite: Three courses in philosophy or consent of instructor

PHIL 390, 590, 690
Tutorial Studies in Philosophy
Senior majors undertaking honors projects should elect one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

PHILOSOPHY

PHIL 191, 391, 591, 691
Directed Study in Philosophy
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

PHIL 399, 599, 699
Independent Study in Philosophy
Advanced students of philosophy may elect one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

PHYSICS

Professors: Brandenberger (Alice G. Chapman Emeritus Professorship in Physics), Cook (Philetus E. Sawyer Emeritus Professorship in Science), Stoneking
Associate professors: Collett (chair), Pickett
Assistant professor: Martin*
Visiting assistant professor: Clausen
Post-doctoral fellow: O'Leary

* On leave Term(s) II

Physics represents an inquiry, both theoretical and experimental, into the nature of the physical universe. The theoretical approach involves constructing and exploring abstract models of nature, while the experimental approach involves investigations of physical systems that provide avenues for evaluating theories and for suggesting new theories. Taken together, theory and experiment aim at the construction of a single, compact, and far-reaching conceptual framework that accounts for all properties of the physical universe.

The physics curriculum at Lawrence is structured to help the student develop a firm grasp of the important theories and a secure competence in contemporary experimental techniques. Requirements for the major reflect this structure. On the theoretical side, the major moves from a general survey to more detailed intermediate courses to advanced electives, possibly culminating in a theoretical research project. On the experimental side, the major moves from a study of standard techniques of data analysis to an intermediate laboratory in electronics to a project-oriented advanced laboratory, possibly culminating in an experimental research project. Throughout the curriculum, contemporary computational approaches to problems in physics play a significant role alongside the traditional approaches.

Prospective engineers will find that a major in physics automatically fulfills nearly all of the requirements for Lawrence's 3-2 engineering program.

Students who have strong secondary interests in biology, chemistry, or geology may construct majors involving physics and one of the other three natural sciences, using the interdisciplinary major in the natural sciences.

In addition, a minor in physics offers an opportunity for those who wish to supplement a major in another discipline with a significant exposure to physics.

PHYSICS

2010-2011 Course Catalog

Required for the physics major
Physics 220, 225, 230, 310, 320, 330, and two additional six-unit courses chosen from Physics 340 and above, excluding directed study, tutorial and independent study courses taken as part of the *Senior Experience* or for other reasons. Physics majors without advanced placement should start with Physics 141, 151 and 160. Majors who do not intend to pursue graduate study in physics may petition the department to substitute appropriate upper-level offerings in other departments for up to two of the required physics electives. The following program is typical:

- Freshman: Physics 151, 160; Mathematics 140, 150, 160
- Sophomore: Physics 220, 225, 230; Mathematics 210
- Junior: Physics 310, 320, 330; physics electives
- Senior: Physics 599 or 699, *Senior Experience*; physics electives

Additional courses in mathematics, chemistry, computer science biology, and geology are often elected. The prospective major should consult early and regularly with the faculty in the department.

Required for the interdisciplinary major in the natural sciences in physics and a secondary discipline

1. Physics 151 and 160
2. Any two of
    a. Biology 110 and 120 or Biology 110 and 140
    b. Chemistry 115 and 116 or equivalent
    c. Geology 110 (any section) and Geology 210 chosen to include the secondary discipline.
3. At least 10 six-unit courses in the sciences (biology, chemistry, geology, physics) numbered 200 or above, with at least five in physics and at least three in the secondary discipline. The five courses in physics must include Physics 225, 230, 310, and 330.

Required for the physics minor

1. Physics 151 and 160
2. Physics 225
3. Three additional six-unit courses in physics, at least two of which must be chosen from physics courses numbered 220 and above, excluding independent studies and capstone courses, and no more than one of which can be chosen from Physics 103-115 and Physics 205
4. C average in the minor

A student pursuing a minor in physics must consult with a member of the department early and often to plan and monitor progress in the minor.

PHYSICS

Opportunities for non-majors
The physics curriculum offers non-majors the opportunity to take one or more terms of physics as part of their liberal education. Although every course is open to all suitably prepared students, Physics 103, 107, 110, 112, 115, 141, 151, 160, and 220 have traditionally attracted non-majors.

The laboratory science General Education Requirement
The following courses in the physics department satisfy the university's degree requirement of one laboratory course in natural science: Physics 103, 107, 110, 141, 151, 160, 220, 330.

Graduate School
Majors preparing for graduate school in physics will probably take more courses in physics than the required minimum. Physics 430, 440, and 460 are recommended for all such students. Other departmental offerings (Physics 340, 410, 500-570) are appropriate for students with particular interests in the topics of those courses. All students contemplating graduate studies in physics should undertake at least one term of independent study/ research in the senior year and/or seek opportunities at Lawrence or elsewhere for full-time research during the summer after the junior year. Students contemplating graduate studies in physics should discuss their plans early and often with members of the department.

Certification for secondary teaching in physics
Majors seeking certification to teach physics at the secondary level should read the section of this catalog on teacher certification and consult early and often with members of the Department of Education. Physics majors who plan to teach physics at the secondary level may petition the department to substitute physics courses numbered below 199 for the two required physics electives.

Recommended courses outside the department
Courses in mathematics, chemistry, and computer science are frequently elected to support a major in physics, but courses in geology, biology, economics, philosophy, anthropology, and other areas have occasionally been chosen by physics majors whose post-graduation objectives have an interdisciplinary dimension. With departmental approval, up to two upper-level courses in other departments may be substituted for required physics electives.

Advanced Placement
Students with strong backgrounds should seek advanced placement and credit, normally by submitting scores on the Physics Advanced Placement Examination of the Educational Testing Service. Advanced placement without credit is awarded to students who submit satisfactory evidence that they both understand most of Physics 120 or 150 and are able to remedy weaknesses on their own initiative.

International and off-campus study
International and off-campus study The Associated Colleges of the Midwest program at Oak Ridge National Laboratory is available to majors in physics. Further, with careful advance planning, physics majors at Lawrence can arrange to be off campus for a term — typically the Winter or Spring Term of the junior year — without jeopardizing progress in the major. Thus, physics majors can participate in off-campus programs, even if those programs contain no scientific components. The Lawrence London Centre, among others, has been a popular destination for physics majors.

PHYSICS

Course Numbering
Courses of general interest requiring minimal or no prerequisite are numbered 103-115. The introductory courses, 141, 151, and 160, require elementary calculus. Physics 141 introduces ideas in calculus together with concepts in physics. The calculus introduced in physics 141 will not replace any mathematics prerequisites in courses numbered 160 and higher. Intermediate courses are numbered between 200 and 300 and typically list calculus and differential equations as prerequisites. Advanced courses, many of which list one or more intermediate courses as prerequisites, are intended for juniors and seniors and are numbered above 300. Tutorial studies in physics and independent study in physics also are offered.

***Senior Experience* in Physics**
The *Senior Experience* in the Department of Physics consists of an independent investigation tailored to the individual student's goals in physics. The process consists of a formal project proposal to the Department followed by one or two six-unit independent study courses under faculty supervision and culminating in a capstone thesis paper.

All seniors will participate in a two-unit senior seminar in which they present their work orally. Students with double majors or degrees may propose initiatives that span multiple departments but both departments must approve such proposals before the project goes forward.

Courses

PHYS 103
Light! More Light!
Focuses on the nature of light and its interaction with matter. Topics include waves, quanta, lasers, modern optics, wave-particle duality, and the following paradox: While the theory of light is unsurpassed in elegance, predictive success, and heuristic influence, light remains mysterious and continues to defy common sense. Weekly laboratory exercises on laser physics and modern optics are incorporated in the regular, two-hour class periods. Offered every two or three years. Units: 6.

Prerequisite: High school physics and trigonometry

PHYS 107
Physics of Music
Explores the relationship between physics and music, covering such topics as vibrations, waves, interference, resonance, wave forms, scales and temperament, physics of musical instruments, characteristics of auditoriums, impact of electronics. Weekly laboratory. Units: 6.

PHYS 110
Topics in Astronomy
Treats selected topics in astronomy and cosmology: the solar system, stellar evolution and death, black holes, galaxies, the big bang theory of the early universe. Astronomical observations are interpreted in light of known physical laws to form a comprehensible picture of the universe. Units: 6.

PHYSICS

PHYS 112
Energy Technology, Society, and the Environment
Explores energy production, storage, and usage as they are currently practiced. Certain emerging technologies will also be addressed. Environmental and socio-economic impact will be discussed in the context of limitations imposed by the laws of physics. Units: 6.

Also listed as Environmental Studies 115

PHYS 115
Aspects of Physics
Treats topics selected for the non-scientist who wants one term of physics. In recent years, the course has sometimes focused on relativity and sometimes on energy and the environment. Physics 115 is not intended to serve as a general introduction to physics, as are Physics 120, 130 and Physics 150, 160, and does not supply an adequate background for intermediate or advanced courses. Units: 6.

PHYS 141
Principles of Classical, Relativistic, and Quantum Mechanics
A calculus-based introduction to fundamental concepts in mechanics, from Galileo and Newton through relativity and quantum mechanics. Weekly laboratories emphasize the acquisition, reduction and interpretation of experimental data and the keeping of complete records. Explicit instruction in calculus will be provided. Units: 6.

Prerequisite: None, but calculus is recommended.

PHYS 151
Principles of Classical Physics
A continuation of Physics 141. Physics 151 offers a brief review of mechanics, and covers electricity, magnetism, circuits, waves, optics and thermal physics. Weekly laboratories emphasize the acquisition, reduction, and interpretation of experimental data and the keeping of complete records. Units: 6.

Prerequisite: PHYS 141, or one year of high school physics and MATH 140.

PHYS 160
Principles of Modern Physics
Treats basic ideas developed since 1900: quantum aspects of nature, special relativity, elementary wave mechanics, atomic and nuclear structure, fundamental particles. Weekly laboratory. Units: 6.

Prerequisite: PHYS 151 and MATH 140

PHYSICS

PHYS 201
In Pursuit of Innovation
This course acquaints students with innovation — its objectives, major characteristics, and likely origins. The course focuses mainly on scientific and /or technological innovation; it will be taught as a joint physics/economics offering. The course will include one or two lectures per week along with student presentations and hard-charging discussion based on readings from books, articles and case studies. Outside resource individuals (in most cases Lawrence alumni) who are well-placed and experienced in innovation will offer advice and guidance to particular student projects. Units: 6.

Also listed as Economics 211

Prerequisite: Two courses in mathematics, or two courses in physics, or two courses in economics, or consent of instructor

PHYS 212
Origins: Solar System, Earth, Life
This course explores questions of deep origins — of the Solar System, Earth, and Life — and how these can be addressed through the methods of physics, geology, and biology. Topics considered include stellar evolution, planetary formation, the origin of the Moon, the differentiation of the Earth, and geological and biological constraints on the nature of the earliest lifeforms. Units: 6.

Also listed as Geology 215, Biology 212

Prerequisite: Introductory courses in any two different natural sciences; at least one intermediate course in a natural science; and at least sophomore standing.

PHYS 220
Physical Electronics
A laboratory course covering analysis, construction, and testing of circuits used in present-day experimental research. Strict adherence to standard laboratory practice required. Two laboratories and one lecture per week. *Note:* To register, you must sign up with instructor. Units: 6.

Prerequisite: PHYS 151 and MATH 130 or 140

PHYS 225
Computational Mechanics
Introduces symbolic and numerical computation through examples drawn mainly from classical mechanics but also from classical electromagnetism and quantum mechanics. This course emphasizes computer-based approaches to graphical visualization, the solution of ordinary differential equations, the evaluation of integrals, and the finding of roots, eigenvalues, and eigenvectors. Units: 6.

Prerequisite: PHYS 151 and MATH 210

PHYSICS

PHYS 230
Electricity and Magnetism
Develops and explores charge and current densities, particle motions, electrostatics, magnetostatics, induction, Maxwell's equations, electromagnetic waves, responses of matter. Units: 6.

Prerequisite: PHYS 225 and MATH 210

PHYS 310
Quantum Mechanics
Develops the theoretical framework used to describe microscopic phenomena: wave-particle duality, wave functions, states and observables, Schrödinger equation, uncertainty relations, bound states, quantum scattering, angular momentum, spin, and stationary and time-dependent perturbation theories. Units: 6.

Prerequisite: PHYS 225, MATH 210, and some exposure to quantum mechanics (e.g. PHYS 160, CHEM 470)

PHYS 320
Thermal Physics
Treats elementary statistical mechanics, Bose-Einstein and Fermi-Dirac statistics, kinetic theory, and classical thermodynamics. Units: 6.

Prerequisite: PHYS 160 and 225 and MATH 210

PHYS 330
Advanced Laboratory
Independent work on experiments selected from the following areas: optical, Mössbauer, alpha, beta, gamma ray, and x-ray spectroscopy; optical double resonance; magnetic resonance; vacuum techniques; solid-state physics; laser physics; nuclear physics. Three laboratories weekly; no lectures. Units: 6.

Prerequisite: PHYS 160, 220 and 225; PHYS 310 recommended

PHYS 340
Optics
Treats geometrical optics, interference, diffraction, polarization, and various other topics in classical and contemporary optics. Units: 6.

Prerequisite: PHYS 160 and PHYS 225 or 230

PHYSICS

PHYS 350
Physics on Your Feet I
This is the first part of a two-course sequence in which approaches to a wide variety of problems in all major areas of physics are discussed. Special emphasis is placed on quickly identifying relevant fundamental principles and make order of magnitude estimates. Units: 2.

Prerequisite: PHYS 225, 230 and 310

PHYS 351
Physics on Your Feet II
This is the second part of a two-course sequence in which approaches to a wide variety of problems in all major areas of physics are discussed. Special emphasis is placed on quickly identifying relevant fundamental principles and make order of magnitude estimates. Units: 2.

Prerequisite: PHYS 225, 230 and 310.

PHYS 410
Advanced Mechanics
Treats various topics selected from: mechanics of rigid bodies, Lagrangian and Hamiltonian formulations, variational principles, fluids, classical scattering, relativistic mechanics, and theory of small vibrations. Units: 6.

Prerequisite: PHYS 225 and MATH 210

PHYS 430
Advanced Electricity and Magnetism
Treats several topics selected from: multipole expansions, radiation from accelerated charges, solutions to Laplace's equations, retarded potentials, wave guides, modern optics, and electron physics. Units: 6.

Prerequisite: PHYS 230 and MATH 210

PHYS 440
Mathematical Methods of Physics
Treats several topics selected from: Fourier series and transforms, partial differential equations, special functions, numerical methods, matrix methods, calculus of variations. Units: 6.

Prerequisite: PHYS 225 and MATH 210

PHYS 460
Advanced Modern Physics
Treats quantum mechanically various topics selected from atomic and nuclear physics. This course will concentrate on properties of atoms and nuclei, atomic and nuclear structure, the deuteron, nucleon-nucleoon scattering, nuclear models, and nuclear decay. Six supplemental laboratory exercises that focus on laser spectroscopy will be arranged. Units: 6.

Prerequisite: PHYS 310 and MATH 210

PHYSICS

PHYS 500
Special Topics in Physics
Treats selected topics, such as relativity, fundamental particles, fluid mechanics, and surface physics that vary according to the interests of students and staff. Units: 6.

PHYS 520
Plasma Physics
Explores the properties of hot, ionized gases: motion of charged particles in electric and magnetic fields, plasma kinetic theory, fluid models, waves and instabilities, wave-particle interactions (Landau damping), and plasma confinement and transport. Offered every two or three years. Units: 6.

Prerequisite: PHYS 230

PHYS 530
Solid State Physics
Explores the fundamental properties of crystalline solids from an experimental perspective. Experimental investigations using scanning probe microscopy and x-ray diffraction introduce the topics of crystal structures and the reciprocal lattice, phonons, and the quantum theory of electronic band structure. Insights from experiments will guide theoretical development. Units: 6.

Prerequisite: PHYS 310

PHYS 540
Computational Physics
Treats computational approaches to problems in physics with particular emphasis on finite difference and finite element methods for solving partial differential equations as they arise in electromagnetic theory, fluid mechanics, heat transfer, and quantum mechanics and on techniques for graphical visualization of the solutions. Units: 6.

Prerequisite: PHYS 225

PHYS 560
Topics in Astrophysics
Treats selected topics in astrophysics and cosmology, such as orbital mechanics, stellar structure and evolution, galactic dynamics, the origin and evolution of the Universe. Units: 6.

Prerequisite: PHYS 225 and PHYS 230

PHYS 570
Biological Physics
Develops and explores the physical principles underlying biological systems, with a particular emphasis on building quantitative models. Applies fundamental topics including thermodynamics, fluid dynamics, elasticity, and electrostatics to model molecular and cellular phenomena such as gene expression, virus assembly, DNA bending and stretching, and nerve impulses. Units: 6.

Also listed as Biology 570

Prerequisite: PHYS 151, and one of PHYS 230, CHEM 252, CHEM 340, or BIOL 354

PHYSICS

PHYS 390, 590, 690
Tutorial Studies in Physics
Readings of texts and/or current literature to study a topic not covered in regular offerings. Topics must be carefully defined and a bibliography assembled before permission to enroll is granted. Units: Variable.

Prerequisite: Counter Registration Required.

PHYS 191, 391, 595, 691
Directed Study in Physics
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

PHYS 399, 599, 699
Independent Study in Physics
Theoretical or experimental independent study. A written proposal must be submitted to the department at least one term before enrolling. Recent independent studies have been undertaken in fluid mechanics, general relativity, atomic systems coupled to electromagnetic fields, phase transitions in liquid crystals, plasma physics, and robotics. Units: Variable.

Prerequisite: Counter Registration Required.

PSYCHOLOGY

Professors: Glick (Henry Merritt Wriston Professorship in the Social Sciences), Gottfried, Hetzler, Metalsky
Associate professors: Ansfield, Haines (chair)
Visiting associate professor: Fuchs (Counseling Services)
Visiting assistant professor: Konik
Lecturers: Bakken (Lecturer in Psychology), Hilt, Kahl (Counseling Services)

Psychology is the science of mind and behavior. The psychology curriculum is well balanced to represent the breadth of the core areas of psychology (neuroscience, cognitive, developmental, personality, social, health, and clinical psychology) and provide opportunity for the in-depth study of specific topics (e.g., psychopharmacology, music, language, psychopathology, adolescent development, prejudice, emotion). Research, through which psychological theories are developed and tested, is emphasized throughout the curriculum.

2010–2011 Course Catalog

Required for the psychology major

1. Psychology 100, 280, and 281, and Mathematics 117 or 207
2. Two courses from Group I and two courses from Group II:
    a. Group I: Psychology 250, 260 or 265, 245 or 270
    b. Group II: Psychology 380, 350 or 360, 370 or 340
3. Senior Capstone: Psychology 610
4. Another six units in psychology (Any six units; this may include independent study or practicum credit accrued over more than one term.)
5. One of the courses (in addition to the *Research Methods* sequence) must have a lab.

The courses that meet this lab requirement are Psychology 265, 335, 340, 380, and 530. Majors are strongly advised to complete the Research Methods sequence, which instills basic research skills essential to a sophisticated understanding of the field, in the sophomore year (and, certainly, no later than the junior year).

Research Methods should be completed before majors take laboratory courses numbered 335 or above or courses numbered above 400. Previous or concurrent enrollment in Mathematics 117 (with the Psychology Statistics Laboratory) or Mathematics 207 is a prerequisite for Psychology 280: *Research Methods I*. Mathematics 117 should be taken concurrently with *Research Methods* I.

Research Opportunities
Majors are encouraged to engage in their own empirical research projects in Research Methods, in laboratory and topics courses, and in close collaboration with faculty members in independent study. Students have access to the department's extensive laboratory facilities for research in neuroscience, acoustical analysis, child development, animal and human learning, social, personality, and clinical psychology. We highly recommend that students who wish to pursue honors projects begin them in their junior year.

PSYCHOLOGY

Applied Opportunities
Several opportunities to receive course credit for work within applied settings (e.g., working in a clinical setting in the community) are regularly available — see Psychology 385 and 451. Other practica that similarly combine academic and applied components may be arranged. This includes various opportunities for placement at non–profit human services programs in the local community. For information on such practica, contact the Career Center (920-832-6561), Kathleen Fuchs (920-832-6574), Beth Haines (920-832-6708), Jerri Kahl (920-832-6950) or Jerry Metalsky (920-832-6705)

2010-2011 Course Catalog

Required for the psychology minor

1. Psychology 100: *Principles of Psychology* and preferably Mathematics 117 with *Psychology Statistics Laboratory* (Mathematics 107 or 207 are acceptable).
2. One course from Group I and one course from Group II:
    a. Group I: Psychology 240, 245, 250, 260, 265, 270
    b. Group II: Psychology 340, 350, 360, 370, 380
3. One course from Group III: Psychology 310, 330, 335, 451, 460, 480, 530–580
4. One additional course in psychology
   One of the courses must have a lab (viz., Psychology 265, 280–281†, 335, 340, 350, 380, 530).
5. Psychology 240 and Psychology 250 cannot both be taken to fulfill the minor.
6. C average in the minor

†The student must complete both terms of Psychology 280–281 to meet this lab requirement

Preparations for graduate school
The major program prepares students well for graduate study in psychology or related fields. Students interested in graduate study should consider conducting research with a faculty member, consider taking Psychology 480, and fully utilize the Career Center and alumni who have gone to graduate school. Names and contact information for alumni can be obtained through the Alumni Relations office. For those who pursue other careers, the research skills learned by majors are widely applicable. Students who are interested in the major program or curious about what kind of career opportunities exist in the field of psychology are urged to visit the graduate school section of the departmental Web page (www.lawrence.edu/dept/psychology/grad/) and the Career Center for more information.

Students interested in mental health careers should pay particular attention to the department's clinical psychology sequence: Psychology 250, 330 or 335, and 451. Students are encouraged, but not required, to take Psychology 330 or 335 and 451 in consecutive terms. Psychology 451 allows students to gain supervised practical experience at a local mental health facility.

Students interested in graduate study should speak to their advisors and take a topics course related to their area of interest.

Off–campus study
See Urban Studies

PSYCHOLOGY

Advanced Placement
Students who score 4 or better on the Psychology Advanced Placement Examination of the College Entrance Examination Board are given credit for Psychology 100 (which fulfills one of the major requirements). Students who plan to major in psychology and place out of Psychology 100 are advised to take one or two courses in Group I during their freshman year.

Courses

PSYC 100
Principles of Psychology
An introduction to the science of mind and behavior with an emphasis on empirical approaches. Includes a survey of the contributions to our understanding of behavior by research and theory in the various topical areas of psychology and careful consideration of continuities between those topical areas. Units: 6.

PSYC 180
Psychology of Learning
An investigation of how people learn. This course examines learning theories (*e.g.,* behavioral, humanistic, cognitive, constructivist) and their implications for the educational process in schools. Other topics include learning and the brain, the nature of expertise, the design of learning environments, and approaches to instruction that promote meaningful learning. Practicum of 20 hours required. Units: 6.

Also listed as Education Studies 180

PSYC 210
Applied Psychology: Peer Education
Applied work in community psychology, carried out in conjunction with Counseling Services, in preparation toward becoming a Peer Educator. Focus is on learning strategies for assessing and developing community, group process, and communication. Students investigate topics such as interpersonal decision-making, sexual assault, and substance abuse. Through assigned readings, class discussions, presentations, and guest speakers, students will develop interpersonal facilitation skills, learn aspects of community and campus culture, and collaborate in the planning of educational programs. Units: 3.

Also listed as Education 210

PSYC 220
The Holocaust
An examination of the social psychological dimensions of the Holocaust. Topics include social psychological and cultural origins of the Holocaust (including the role of Christian anti-Semitism); social psychological aspects of Nazi ideology; and understanding perpetrators, victims, and bystanders. Units: 6.

Prerequisite: Sophomore standing

PSYCHOLOGY

PSYC 230
Psychology of Music
A scientific approach to questions about musical structure and its effect on human behavior and mental experience. Topics include the physical characteristics of sound that specify pitch, loudness, and timbre; the perception of melody and rhythm; the universality of musical structures; the psychology of musical ability and performance; and the effect of music on emotions. Ability to read music and familiarity with the basics of music theory recommended. Units: 6.

Prerequisite: PSYC 100 or sophomore standing; ability to read music and familiarity with the basics of music theory recommended

PSYC 240
Personality Psychology
A survey and evaluation of the major theories of personality in the context of current research and application. Deviant personality functioning will also be examined. Units: 6.

PSYC 245
Health Psychology
This course explores the link between mind and body from various psychological perspectives such as social, clinical, and psychobiological. We will survey the role of stress, emotion, self-regulation, and individual differences as predictors of health and illness. We also will examine assessment, diagnostic, treatment, and ethical issues in psychophysiological disorders. Units: 6.

Also listed as Biomedical Ethics 245

Prerequisite: PSYC 100 or sophomore standing

PSYC 250
Psychopathology
A study of the major psychological disorders. Theory and research into the origins of each disorder are examined from a variety of perspectives (psychoanalytic, physiological, cognitive, behavioral, and humanistic). Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 255
Topics in Psychology
Topics courses will explore a particular topic in psychology at the intermediate level. Topics will vary with each offering of the course. Different offerings of the course may be taken for credit with the instructor's consent. Units: 6.

Prerequisite: PSYC 100 or sophomore standing.

PSYCHOLOGY

PSYC 260
Developmental Psychology
A study of the development of behavior and mental processes from conception through middle childhood. Topics include prenatal development, attachment, children's language skills, and social and cognitive development. A variety of theoretical perspectives are covered. Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 265
Developmental Psychology
Identical in content to Psychology 260, but requiring a weekly three-hour laboratory that involves systematic work with children to learn and apply assessment techniques and experimental methodologies for the study of development. Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 270
Social Psychology
A psychological approach to the study of individuals in a social context. Research and theories concerning personality, emotion, cognition, and perception are used to understand such topics as self-identity, perception of others, prejudice, social influence, and personal relationships. Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 275
Lesbian, Gay, Bisexual, and Transgender (LGBT) Psychology
This course will examine the emerging psychological literature on the lives of lesbian, gay, bisexual, and transgendered (LGBT) persons. Specific topics will include: sexual/gender identity across the lifespan, "coming out" as a sexual/gender minority, transphobic and homophobic bigotry, transgender and same-sex relationships and parenting, and LGBT issues in late-life. Units: 6.

Also listed as Gender Studies 275

PSYC 280
Research Methods I
The first course in a two-term sequence designed to introduce psychology majors to the principles of research design, data collection, data analysis, and research report writing. This term focuses on philosophy of science, the role of theory in research, and research design. Students design an empirical project to be executed during *Research Methods II*. Sequence should be taken in the sophomore year and in consecutive terms. Units: 6.

Prerequisite: Sophomore standing and MATH 117or MATH 207

PSYCHOLOGY

PSYC 281
Research Methods II
The second course in a two-term sequence for psychology majors (see Psychology 280). This term focuses on the execution of empirical research projects, analysis of data, inferential and advanced correlational statistics, and interpretation of results. Students complete an empirical project. Sequence should be taken in the sophomore year and in consecutive terms. Units: 6.

Prerequisite: PSYC 280

PSYC 285
Cross-Cultural Psychology
An examination of the intricate connections between cultural experiences and psychological processes. Topics include cultural contributions to development and socialization, identity and personality, morality and religion, emotions, and interpersonal relationships. Emphasis will be placed on developing an understanding of cultural and cross-cultural research methods and critical interpretation of research results. Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 296
Practicum: Peer Education
A continuation of work begun in Psychology 210. Students carry out peer education programs on various topics. Units: Variable.

Prerequisite: PSYC 210 or consent of instructor

PSYC 310
Psychology of Gender
An examination of theory and research on gender identity, gender roles, and gender similarities and differences. Topics include gender stereotypes, gender role development, sexual orientation, sex education, as well as gender variations in cognitive skills, aggression, mental and physical health, and family roles. Units: 6.

Also listed as Gender Studies 270

Prerequisite: Sophomore standing

PSYC 330
Clinical Psychology
An examination of the major approaches to psychotherapy (*e.g.,* psychodynamic, cognitive, behavioral, humanistic). Students also learn basic interviewing techniques and examine ethical and professional issues. Units: 6.

Prerequisite: PSYC 250 and sophomore standing

PSYCHOLOGY

PSYC 335
Clinical Psychology with Lab
Identical in content to PSYC 330 but requiring a weekly laboratory that focuses on development of basic clinical skills. Examples include development of clinical interviewing skills, conducting relaxation inductions, and systematic desensitization. Students will learn how to quantify improvement in symptoms and develop their clinical skills. Units: 6.

Prerequisite: PSYC 250 and sophomore standing

PSYC 340
Cognitive Psychology
An investigation of the mental processes involved in the acquisition, organization, and use of knowledge. Information-processing and other approaches are used to study pattern recognition, attention, memory, imagery, problem-solving, and related topics. One laboratory per week involving class demonstrations and experiments. Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 345
Distributed Cognition
Distributed cognition explores the role of the environment, artifacts, social interaction, and culture in human reasoning, problem-solving, and learning. Domains of study range from the sophisticated (ship navigation) to the everyday (time-telling). Emphasis is placed on studies of cognition in real-world settings. Units: 6.

Also listed as Education Studies 345, Anthropology 345

Prerequisite: Sophomore standing.

PSYC 350
Psychopharmacology and Behavior
An interdisciplinary examination of the ways in which behaviorally active drugs exert their effects, drawing on research in pharmacology, psychology, biochemistry, anatomy, and neurophysiology. Provides an understanding and appreciation of the role of behaviorally active drugs in people's lives, today and in the past. Units: 6.

Prerequisite: Sophomore standing

PSYC 360
Brain and Behavior I
An introduction to the structure and function of the nervous system and its relationship to behavior. Topics include cellular physiology, neuroanatomy, sensory processes, motor control, and neuropharmacology. No laboratory. Units: 6.

Prerequisite: Sophomore standing; at least one biology course recommended

PSYCHOLOGY

PSYC 370
Perception
An introduction to the physiological and psychological processes by which we receive, transform, and use the information from the world acquired through our senses. Special emphasis on visual and auditory perception to allow a more in-depth study of two perceptual systems and to provide information useful to those interested in the visual arts and music. Units: 6.

Prerequisite: PSYC 100 or sophomore standing

PSYC 375
Introduction to Phonetics
An introduction to the science of speech sounds, focusing on descriptive and experimental studies of articulation and speech acoustics. Laboratory demonstrations of speech production, acoustical analysis, and speech synthesis are combined with lecture/demonstrations to relate phonetics research to theories of phonology and language acquisition. Units: 6.

Also listed as Linguistics 370

Prerequisite: LING 150, PSYC 340 or consent of instructor

PSYC 380
Learning and Conditioning
An investigation of the basic principles of learning, including classical conditioning, operant conditioning, punishment, biological constraints on learning, and behavior modification. One laboratory per week involving animal learning experiments. Units: 6.

Prerequisite: PSYC 100 and sophomore standing, or consent of instructor; PSYC 280 and 281 recommended

PSYC 385
Practicum: Language Assessment
Students work with preschoolers learning English as a second language at a local child care center. Students provide language enrichment and assess the children's progress. Units: Variable.

PSYC 451
Field Experience in Clinical Psychology
Practical experience working in clinical settings in the local community. Students spend a minimum of ten hours per week at assigned settings, attend regular class supervision meetings with instructor, complete complementary readings, and write a final paper. Applications must be submitted by the end of the fifth week of Winter Term. Units: 6.

Prerequisite: Junior standing as a psychology major, PSYC 250, PSYC 330 or PSYC 335, and consent of instructor

PSYCHOLOGY

PSYC 460
Adolescent Psychology
A psychological approach to the study of development during the years between the onset of puberty and early adulthood. Topics include theories of adolescence, achievement motivation, identity formation, gender and sexuality, and family and peer relations. Units: 6.

Prerequisite: PSYC 260 or 265

PSYC 480
Historical Origins and Contemporary Viewpoints of Psychology
A survey of the origins of modern psychology, examining the influence of various philosophical perspectives and the transition to current scientific approaches. Works by authors of historical significance and current trends in psychological theory and practice are read and evaluated. Units: 6.

Prerequisite: Junior standing and at least one course in psychology, or consent of instructor

PSYC 530
Brain and Behavior II
An examination of interrelationships between the brain and behavior. Topics include sleep, language, motivation, emotion, learning, and mental disorders. One laboratory per week on basic neuroscience techniques. Units: 6.

Prerequisite: PSYC 360

PSYC 535
Workshops and Mini-courses in Psychology
These workshops and mini-courses are designed to cover specialized topics within Psychology either emerging as important research areas or are advanced techniques used to address questions in Psychology.

Workshop for Fall 2010: Mindfulness Meditation
Mindfulness meditation is an emerging area of treatment for a variety of psychological and physical problems. Its roots are in Eastern philosophy, and it is now being widely applied in conjunction with more traditional Western approaches. This workshop will explore the practice of mindfulness meditation and the research on its effectiveness for mental health. Class will meet on September 18 and October 2. Students must attend both sessions.

Workshop for Winter 2011: Adolescent Depression
Depression that develops early in life tends to be recurrent and predictive of future difficulties. This workshop will address the etiology, developmental context, and treatment of depression in adolescents. Theory and research on gender differences will be a major focus. Class will meet on January 9 and January 23. Students must attend both sessions.

Workshop for Spring 2011: Functional Aspects of Non-Suicidal Self- Injury: Why do people hurt themselves?
This workshop will address the phenomenon of non-suicidal self-injury. Foci include: descriptive features, associated psychopathology and other correlates, functions, theoretical models, and treatment. NSSI is a common phenomenon among young adolescents, and the course will examine NSSI within its' development context. Class will meet on April 3 and April 17. Students must attend both sessions.

Units: Variable.

PSYC 540
Topics in the Psychology of Language
An examination of the nature and structure of language, integrating knowledge from linguistics, psychology, neurophysiology, and sociology. Focus on the psychological theories and experimental evidence about language production and perception. Units: 6.

Also listed as Linguistics 450

Prerequisite: PSYC 340, LING 150, or consent of instructor

PSYC 545
Gesture Studies
Gesture studies is an interdisciplinary field that examines the use of the hands and other parts of the body in communication and cognition. In this seminar we discuss studies of gesture types, universals, and variations; gesture development; gesture production and perception; relations of gesture to thought and language (spoken and signed); and functions of gesture in human interaction, problem-solving, and learning. Units: 6.

Also listed as Linguistics 545, Education Studies 545

Prerequisite: One course in linguistics or psychology, or consent of the instructor

PSYC 550
Topics in Mood Disorders
An examination of the primary theories and research on Mood (Depressive) Disorders. We will examine issues pertaining to the origins of depression, assessment and diagnosis of depression, and the effectiveness of different treatments. Emphasis will be placed on cognitive, interpersonal, behavioral, psychodynamic, and biological perspectives. Units: 6.

Prerequisite: PSYC 250, 280, 281 or consent of instructor

PSYCHOLOGY

PSYC 560
Topics in Gender and Social Development
This seminar examines social development in childhood and adolescence. A variety of issues will be explored including achievement motivation, attachment, and aggression. Special emphasis will be given to the topics of gender identity, gender roles, sex education, and sexual orientation.

Fall Term 2010: Adolescent Peer Relationships and Peer Influence
This seminar examines the developmental and sociocultural experiences of adolescent peer relationships and peer influence. Emphasis will be placed on understanding 1) how membership in different social groups can contribute to variations in peer relationships, and 2) how multiple modes and motivations of peer influence can impact adolescents' peer interactions.

Winter Term 2011: Gender and Social Development
This class may be cross-listed as GEST 560. Interested students should contact the Registrar once the term begins.

Units: 6.

Prerequisite: PSYC 260 or 265, MATH 117, or consent of instructor

PSYC 570
Topics in Prejudice
Examination of the psychology of prejudice. Readings and discussions cover general theories of prejudice as well as the dynamics of specific types of prejudice (*e.g.,* racism, sexism). The specific areas covered may shift from year to year. Units: 6.

Prerequisite: PSYC 270, MATH 117, or consent of instructor

PSYC 575
Topics in Emotion and Health
This seminar will explore the psychology of human emotion from scientific, philosophical, and phenomenological perspectives and examine the implications of emotions for mental and physical well-being. During the first half of the term, we will examine various theories of emotion. During the second half, each class will focus on a specific emotion or set of related emotions. Units: 6.

Prerequisite: PSYC 270, MATH 117, or consent of instructor

PSYC 580
Topics in Neuroscience
A study of the nervous system from the perspectives of psychology, biology, and/or biological anthropology. Topics vary year to year and may include glial cells, neural development, and the evolution of nervous systems and neurotransmitter systems. Lecture only. May be repeated with consent of instructor.

PSYCHOLOGY

Topic for Winter 2011: Evolutionary Perspectives on Human Brain and Cognition
This course will consider the human brain and human cognition through the analysis of comparative studies of great apes, the fossil record of human brain evolution, evolutionary genetic evidence, and adaptationist approaches. We will seek to develop a critical understanding of recent findings, in the light of past research.

Units: 6.
Also listed as Biology 340, Anthropology 580

Prerequisite: CHEM 116 or 119, and either BIOL 140 and one course in psychology, or PSYC 360 and one course in biology; or consent of instructor

PSYC 610
Senior Capstone I
First course in a two-term, required sequence for senior psychology majors. Section meetings focus on discussions of readings related to section topics and to student projects. Students will complete a substantial written senior thesis based on an original empirical project, applied work, or critical review of established research and theory. Students will publicly present their work in senior presentations. Units: 6.

Prerequisite: Senior standing and declared major in psychology

PSYC 390, 590, 690
Tutorial Studies in Psychology
Advanced study arranged and carried out under the direction of an instructor. Units: Variable.

Prerequisite: Counter Registration Required.

PSYC 191, 391, 591, 691
Directed Study in Psychology
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

PSYC 195, 395, 595, 695
Practicum in Psychology
Practica include a wide variety of fieldwork opportunities in psychology. For example, students might do applied work in the areas of domestic violence, mental health treatment, family legal services, victim assistance, developmental disabilities, human resources, or school psychology. Practica can be done during the academic year (at local placements or on campus) or during the summer. Units: Variable.

Prerequisite: Counter Registration Required.

PSYCHOLOGY

PSYC 399, 599, 699
Independent Study in Psychology
Advanced research, arranged in consultation with the department. Students considering an honors project should register for this course, for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

RELIGIOUS STUDIES

Professor: Carr*
Associate professor: Vorenkamp (chair)
Assistant professor: Smith

* On leave Term(s) III

Courses in Christianity, Buddhism, and Islam form the core offerings in the department. Students examine cultural and social expressions of those religions (sacred texts, rituals, instances of ecstasy and enthusiasm, reflective writings, institutions) at a particular period, over time, and in relation to broader historical, philosophical, and ethical issues. In addition, a number of elective courses are offered that focus on a particular theme, issue, or tradition not covered in the core offerings. Such courses include *Gandhi*, *Rationality and Religious Beliefs* and Hebrew Prophets.

2010-2011 Course Catalog

Required for the religious studies major
The major in religious studies comprises 9 courses.

- Religious Studies 100: *Introduction to Religious Studies* and Religious Studies 600: *Seminar on Methodology* are taken by all majors.
- Four courses from the core offerings must be taken, two in one tradition, and two in a second tradition.
- Core courses in Christianity: 260, 270, 400, 500, 560. [Note: Either 260 or 270 must be taken by majors and minors choosing Christianity as one of their core traditions]
- Core courses in Islam: 240, 280, 335, 550, 580.
- Core courses in Buddhism: 215, 216, 420, 510.

The remaining three courses required for the major are completed through elective courses and/or additional course work in the core offerings.
Although tutorials and independent studies are not required, advanced majors are encouraged to discuss with their advisor the possibility of doing a tutorial or independent study in an area of particular interest to them.

2010-2011 Course Catalog

Required for the religious studies minor
The minor in religious studies is intended to enable students in related fields to concentrate on the religious tradition connected to their area of interest. Requiring both the introductory course and at least one course outside that tradition ensures that religious studies minors will also develop some expertise in the overall study of religion. The minor requires a minimum of five courses (30 units), to include:

1. Religious Studies 100: *Introduction to Religious Studies*
2. Two courses (12 units) in one of the following areas: Buddhism, Islam, Christianity
3. A seminar-level course (6 units)
4. One additional six-unit course outside the chosen area
5. A C average in the minor is also required.

RELIGIOUS STUDIES

Graduate School
Students considering graduate work in religious studies should note that completion of a graduate degree typically requires demonstrated proficiency in at least one modern foreign language (normally French or German) as well as one or more additional languages (depending on the area of concentration). College work leading toward graduate study should be planned with these requirements in mind.

***Senior Experience* in Religious Studies**
The Department of Religious Studies' *Senior Experience* is a one-term senior seminar (usually taught in the spring term) that examines approaches to the study of religion selected from a school of thought or a more eclectic group of authors. Additionally, interested students may elect to participate in an informal departmental colloquium, in which student work is presented and discussed by majors, minors, and faculty. Students pursuing double majors, double degrees, and education certification are strongly encouraged to consult with their advisors and relevant departments to plan and negotiate their overall *Senior Experience* as early as possible, especially if they are interested in pursuing an interdisciplinary capstone that integrates their interests in both majors, or combines their student teaching with a project in their major.

Courses

RLST 100
Introduction to Religious Studies
An introduction to the academic study of religion exploring cross-culturally some of the fundamental ways in which people experience and understand religion. Questions addressed include: What is religion? What are the basic forms of religious life? What connections exist among self-identity, the sacred, and society? How do those connections help to establish meaning and values in human existence? How is religious knowledge possible? Readings include primary religious texts and critical reflections on religion. Intended primarily for freshmen and sophomores or students with no prior work in the religious studies department. Units: 6.

RLST 210
Hinduism
A survey of the religious and philosophical elements that constitute the broad system of beliefs known as Hinduism. Emphasis is placed on intellectual history, but dominant patterns of ritual and religious experience are also covered. Readings include primary texts and associated commentaries. Units: 6.

RLST 215
Buddhism in India and Tibet
An introductory survey of Buddhist thought and practice in India and Tibet. The historical development of key Buddhist concepts and schools is emphasized. Readings include translations of Buddhist canonical works. Units: 6.

RLST 216
Buddhism in China and Japan
An introductory survey of Buddhist thought and practice in China and Japan. The history of key Buddhist concepts and schools in East Asia is the primary focus. Readings include translations from East Asian Buddhist canonical works. Units: 6.

Also listed as East Asian Studies 216

RELIGIOUS STUDIES

RLST 240
Islam
An introduction to Islam. Students will study primary sources beginning with the Quran and ending with a contemporary Muslim writer. Attention will be focussed on both the theological development of Islam and its lived experience as witnessed through the arts and architecture. Units: 6.

RLST 260
Christianity through the 15th Century
An examination of the major developments in Christian thought and practice from its origin to the late Middle Ages. Topics include the formation of doctrine in the early church, Christian heresies, the cult of martyrs, the development of the monastic tradition, and the rise of the papacy. Units: 6.

RLST 270
Christianity in the Modern World
A study of Christian history from the Reformation to the present. Topics include the origins of Protestantism, the Counter Reformation, Pietism, Deism, Liberal Theology, the Vatican Councils, Dialectical Theology, Fundamentalism. Special attention to the impact of modernity (*e.g.,* the rise of science, the development of the historical critical method, pluralism, secularization). Units: 6.

RLST 280
Quran
A thorough examination of the Quran and what we know about its historical context from early sources. The ways in which the Quran has become a civilization book, molding the thought and artistic expression of all later Muslims while being re-interpreted and re-contextualized as new cultural demands arise, will also be explored. Units: 6.

Prerequisite: Sophomore standing.

RLST 285
Hebrew Prophets
This course will cover the phenomenon of prophecy as it appears in the Hebrew Bible. We will focus especially on the major books of prophecy — Isaiah, Jeremiah, and Ezekiel — but will turn our attention also to some of the minor and non-writing prophets as well. Units: 6.

Prerequisite: Sophomore standing

RLST 290
Religion in Ancient Egypt: Pyramids, Wisdom, and Eternal Life
We will examine the religious tradition of Egypt as it developed in the old, middle, and new kingdoms. Ideas about eternal life as detailed in the Pyramid Texts and embodied in the Pyramids will be closely studied, along with the tradition of wisdom literature. Units: 6.

Prerequisite: Sophomore standing or consent of instructor

RELIGIOUS STUDIES

RLST 316
Greek-Islamic Philosophical Tradition
After covering relevant fundamentals in Greek philosophy (Aristotle and Plato), we will proceed to later philosophers, both Greek (the Neoplatonists) and Islamic (Ibn Sina, Suhrawardi), whose work inherits the same methods and questions, Our special focus will be questions about philosophical method, the soul, and mystical experience. Units: 6.

Also listed as Classics 315

Prerequisite: Sophomore standing.

RLST 330
Rationality and Religious Belief
An examination of the range of views on the relationship between reason and religion, focusing in particular on theistic belief. Questions addressed include: Can God's existence be proven? Is faith different from ordinary belief? Does mystical experience provide adequate grounds for religious belief? Units: 6.

Prerequisite: Sophomore standing

RLST 335
Cairo: Islam in Context
An examination of the place of Islam within medieval and modern Cairo. We will read historical and creative texts in order to better understand how this religion and social system constructed what we know as Cairo. Units: 6.

Prerequisite: RLST 240 or consent of instructor

RLST 350
Gandhi
An examination of the life, times, and thought of Mohandas Gandhi, emphasizing the religious concept of *satyagraha* (holding fast to the truth) and the philosophy of non-violence as the central precepts in his effort to transform Indian society and ultimately of his global influences. Units: 6.

Prerequisite: Sophomore standing

RLST 400
Themes in Modern Western Religious Thought
A critical survey of one or more of the distinctive themes in the religious thought of the West since the Reformation. Units: 6.

Prerequisite: Sophomore standing

RELIGIOUS STUDIES

RLST 420
Systems of Buddhist Philosophy
A detailed examination of five schools of Buddhist philosophy. Close study of each school's explanation of key doctrines such as no-self, interdependent arising, samsara, nirvana, and enlightenment further clarifies the historical development of Buddhist thought in India and China. Readings emphasize primary texts (in translation). Units: 6.

Prerequisite: RLST 215 or 220 and sophomore standing

RLST 500
Seminar: Kierkegaard
Intensive study of the works of the Danish philosopher/theologian considered to be the father of Existentialism. Concentration on Kierkegaard's view of the self and its relation to his stages of existence, with particular attention to his view of faith. Some consideration to the historical context of his thought and his influence on 20th-century theology and philosophy. Units: 6.

Prerequisite: Junior standing or consent of the instructor.

RLST 510
Seminar: Zen Buddhism
Zen Buddhism is perhaps the most widely known form of Buddhism in the West and also the most widely misunderstood. This course provides a detailed look at the history and doctrines of Zen Buddhism in China and Japan. Combining the use of original source materials (in translation) with an emphasis on intellectual history, the course covers specific doctrines that have differentiated the major schools of Zen. Units: 6.

Also listed as East Asian Studies 510

Prerequisite: RLST 220 or RLST 216

RLST 550
Seminar: The Hajj to Mecca
A course examining the institution of the Hajj to Mecca through the history of Islam. We will begin with an examination of what we know about pre-Islamic religious practices in Mecca, but the heart of the course will consist of a close reading of historical pilgrimage narratives, ranging from Ibn Jubayr to Richard Burton. Along the way we will also give attention to pilgrimage in other religious traditions. Units: 6.

Prerequisite: RLST 240 recommended

RLST 560
Seminar: The Problem of Evil
An examination of one of the classic problems of philosophy of religion; the course will examine both traditional theistic analyses of the problem (is the existence of an omni-god incompatible with the existence of evil?) as well as more recent, non-theistic analyses of evil as a social phenomenon. Units: 6.

Prerequisite: RLST 330 or consent of instructor

RELIGIOUS STUDIES

RLST 580
Seminar: Islam and Globalization
This class offers both an introduction to theories of globalization and examines how Islam has interacted over the last generation with stresses related to globalization. Readings will include works by Edward Said, Oliver Roy, V.S. Naipaul, Abdellah Hammoudi, Orphan Pmuk and Colin Thubron. Units: 6.

Prerequisite: RLST 240

RLST 600
Seminar in Methodology
An examination of approaches to the study of religion selected from a school of thought or a more eclectic group of authors. Students are encouraged to draw upon previous coursework. Units: 6.

Prerequisite: Two courses in religious studies or consent of instructor

RLST 390, 590, 690
Tutorial Studies in Religious Studies
Advanced research, arranged and carried out under the direction of an instructor. Units: Variable.

Prerequisite: Counter Registration Required.

RLST 191, 391, 591, 691
Directed Study in Religious Studies
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

RLST 399, 599, 699
Independent Study in Religious Studies
Advanced research, arranged in consultation with the department. Students planning an honors project should register for this course, for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

RUSSIAN

Professor: Yatzeck
Assistant professor: Thomas
Instructor: Krizenesky
Post-doctoral fellow: Kisel

Lawrence offers a major in Russian studies, a major in Russian language and literature, and a minor in Russian. Requirements for each program are outlined below.

Russian is one of the world's most important and widely spoken languages. Knowledge of the Russian language helps broaden students' career opportunities and options in a variety of fields, including business and government service. Students who achieve a high level of language proficiency may wish to pursue internship opportunities available as a result of Lawrence's connections with Appleton's sister city in Russia.

In addition, Russian culture, music, art, and literature are extraordinarily rich. While the culture may be best appreciated by those who know the language, those who have no knowledge of Russian can also find much of value and interest in the study of Russian culture.

Students taking Russian at the beginning and intermediate levels concentrate on acquiring skills in speaking, listening comprehension, reading, and writing. Majors are strongly encouraged to spend a term studying in Russia. Back on campus, upper-level courses and tutorials enable students to improve their critical and analytical skills, learn more about Russia's rich literary and cultural traditions, and gain additional speaking practice. At all levels, students have the opportunity to work with tutors who are native speakers and to take advantage of extracurricular activities, such as weekly Russian Table, film showings, and immersion weekends.

Culture and literature courses taught in translation are designed not only for those studying Russian but for all students. These courses have no prerequisites, and they fulfill a number of general education requirements.

2010-2011 Course Catalog

Required for the Russian studies major

1. First-year Russian: 101, 102, 201 (or the equivalent)
2. Second-year Russian: 211, 212, 250
3. Two courses in literature and culture, selected from the following:
    - Russian 300: *Russia's Golden Age: 19th-Century Literature in Translation*
    - Russian 305: *Repression and Resistance in Soviet/Post-Soviet Literature in Translation*
    - Russian 309: *Brothers Karamazov and War and Peace*
4. Two courses in history and/or government, selected from the following:
    - History 315: *Empire and Nation in Russian History*
    - History 320: *Imperial Russia, 1800-1917*
    - History 325: *The Soviet Union, 1917-1991*
    - Government 330: *Soviet and Post-Soviet Politics*
5. One course that allows students to understand Russia in a larger context, either by studying the literature or history of a neighboring country or countries or by placing Russia in a broader political and economic context as an important participant in international affairs. This course is to be selected from the following:

- University Course 240: *Modern Literature of Central Europe in Translation*
- History 276: *Spy vs. Spy: Espionage and the Cold War*
- History 277: *Eastern Europe in the 20th Century*
- History 435: *Nazism and Stalinism in Comparative Perspective*
- Government 140: *International Studies*
- Government 275: *Global Economic Relations*
- Government 280: *U.S. Foreign Policy*
- Government 340: *International Politics*
- Economics 200: *Economic Development*

Alternatively, students with a primary interest in language could complete an upper-level course based on Russian-language materials Russian 361, 362, or 363 or a tutorial focusing on some aspect(s) of Russian culture or history.

6. A senior-level independent study that results in the completion of a substantial research paper. Students with sufficiently advanced Russian language skills are encouraged to use some Russian language sources in conducting their research. Topics for this capstone experience are to be derived from work done in one of the following courses: Russian 300, 305, 330, 335; History 315, 320, 325; Government 330. Other topics could be approved through consultation with program faculty.

In addition to the requirements listed above, majors are encouraged to further strengthen their Russian-language skills by studying in Russia and/or in an intensive summer language program offered in the U.S.

Students with prior background in Russian who place out of the first-year sequence are required to complete additional language study for the major.

2010-2011 Course Catalog

Required for the Russian language and literature major

1. First-year Russian: 101, 102, 201 (or the equivalent)
2. Second-year Russian: 211, 212, 250
3. Two courses in Russian literature taught in translation, selected from the following:
    - Russian 300: *Russia's Golden Age: 19th-Century Literature in Translation*
    - Russian 305: *Repression and Resistance in Soviet/Post-Soviet Literature in Translation*
    - Russian 309: *Brothers Karamazov and War and Peace*
4. Two courses in Russian literature, taught in the original, selected from the following:
    - Russian 361: *Survey of 19th- and 20th-Century Russian Prose*
    - Russian 362: *Survey of 19th- and 20th-Century Russian Poetry*
    - Russian 363: *Survey of 19th- and 20th-Century Russian Drama*
5. A senior-level independent study that results in the completion of a substantial research paper. Students would be required to analyze some work or works of Russian literature, to be read in the original.

In addition to the requirements listed above, majors are strongly encouraged to further strengthen their Russian language skills by studying in Russia and/or in an intensive summer language program offered in the U.S.

RUSSIAN

Students with prior background in Russian who place out of the first-year sequence are required to complete additional language study for the major.

Required for the Russian minor

1. First-year Russian: 101, 102, 201 (or the equivalent)
2. Second-year Russian: 211, 212, 250
3. Any two courses selected from Russian 300, 305, 309; History 315, 320, 325; Government 330
4. C average in the minor

International and off-campus study
After two years of language study on campus, majors are strongly encouraged to spend a term studying in Russia. Study abroad provides an unparalleled opportunity to make gains in language proficiency and to become familiar with Russian life and culture.

The ACM's Russia Seminar in Krasnodar, held in Term I, provides an excellent educational opportunity; the program includes a ten-day field trip to Moscow and St. Petersburg. Lawrence also has a direct exchange program, also during Term I, with Kurgan State University, located in Appleton's sister city. For both of those programs students live with Russian families.

During Terms I, II, and/or III — as well as during the summer — students may participate in other programs sponsored by such organizations as the Council on International Educational Exchange (CIEE) and the American Council of Teachers of Russian (ACTR).

Students are also encouraged to participate in intensive summer language programs offered in the United States, especially immediately prior to spending a fall term in Russia.

***Senior Experience* in Russian**
The Russian Department's *Senior Experience* consists of a senior-level independent study that further develops work done in another course.

The independent study is intended to help students prepare their capstone project, normally a research paper that makes use of some Russian-language source material. In addition, students will submit a portfolio in the second week of their final term. The portfolio consists of a list of courses and brief statement in which students evaluate their development as Russian majors.

In addition to a copy of the capstone project and the Russian language portfolio, the senior portfolio should contain four course papers, including at least one from a history course and one from a literature course. The complete portfolio will be reviewed and approved or returned for revisions before the end of the term.

Students who are pursuing a double major or teaching certification should work with all concerned departments to assess the feasibility of an interdisciplinary capstone.

RUSSIAN

Courses

RUSS 101
Beginning Russian I
The first course of a three-term sequence. Once students learn the alphabet and pronunciation, they acquire a basis for speaking, understanding, reading, and writing spoken Russian. Cultural information is incorporated throughout the course. Units: 6.

RUSS 102
Beginning Russian II
Continued practice in speaking, reading, writing, and listening comprehension. Cultural information is incorporated throughout the course. Units: 6.

Prerequisite: RUSS 101 or consent of instructor

RUSS 201
Intermediate Beginning Russian
Students acquire a wider range of linguistic structures, which enables them to start speaking, reading, and writing on a higher level. Units: 6.

Prerequisite: RUSS 102 or consent of instructor

RUSS 211
Intermediate Russian I
Grammar review and introduction of more complex grammatical concepts. Students read some authentic literary texts. Cultural information is presented through texts and audio-visual/computer materials. Units: 6.

Prerequisite: RUSS 201 or consent of instructor

RUSS 212
Intermediate Russian II
A continuation of Russian 211. More exposure to literary texts, along with newspaper articles. Video clips continue to improve students' listening comprehension skills and cultural knowledge. Units: 6.

Prerequisite: RUSS 211 or consent of instructor

RUSS 250
Advanced Intermediate Russian
A continuation of Russian 212. More intensive reading, writing, and conversational practice to provide a transition to study abroad. Units: 6.

Prerequisite: RUSS 212

RUSSIAN

RUSS 270
Post-Soviet Film (in English)
This course will focus on the works of seminal filmmakers in the post-Soviet period. Through the prism of post-Soviet films students will be introduced to contemporary Russian culture and to the issues explored within these cinematic narratives: national identity, gender relations, role of the arts in a post-Soviet society, and the re-examination of Russia's historical and cultural past. Taught in English. Units: 6.

Also listed as Film Studies 270

RUSS 285
Russian Conversation & Composition
This course focuses on developing fluency in written and spoken Russian, and improving reading and listening comprehension. Units: 6.

Prerequisite: RUSS 250 or permission of instructor.

RUSS 286
Russian Comversation and Composition II
This course allows students to develop fluency in written and spoken Russian, improve reading and listening comprehension, and deepen their understanding of Russian culture. Units: 6.

Prerequisite: RUSS 285 or consent of instructor

RUSS 300
Russia's Golden Age: 19th-Century Literature in Translation
The texts studied in this course are thematically unified by their examination of romantic and sexual relationships, many of which are limited by social restrictions. Some works will be studied in conjunction with film versions. No knowledge of Russian required. Offered every other year. Units: 6.

RUSS 305
Repression and Resistance in Soviet and Post-Soviet Literature in Translation
Survey of Soviet and post-Soviet literature from 1920 to the present. Course will explore ways in which writers responded to, helped shape, and reacted against the Soviet system. Works will be set in historical and cultural context. No knowledge of Russian required. Offered every other year. Units: 6.

RUSS 307
Men in the Storm of History
Narratives of WW I and the Russian Revolution. Comparisons, where applicable, with American writers influential in Russian letters. Works of Blok, Babel, Sholoxov, Pasternak, Hemingway, and Faulkner. Units: 6.

RUSSIAN

RUSS 308
Dostoevsky, Tolstoy, and Their World (in English)
This course explores the works, thought, and impact of two of the most profoundly important writers of the nineteenth century, Fyodor Dostoevsky and Lev Tolstoy. Possible topics include " Crimes and Punishments, " "History and Narrative, " and "In the Writer's Laboratory. " Taught in English. Russian majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in Russian. Units: 6.

RUSS 310
Russia's Erotic Utopia
This course examines Russia's complex debate over the nature of sexuality, decadence, morality and mortality. Themes include the moral nature of procreation, lust, murder, and resurrection. Readings include Dostoevsky, Tolstoy, Platonov, and Nabokov, as well as film, opera, paintings, and a television miniseries. In English. Units: 6.

RUSS 312
The Russian Nabokov
This course examines Nabokov's Russian works in the context of the Russian literary tradition. We will read poems, stories, a play, and three novels by Nabokov, as well as a sampling of the pre-revolutionary, Soviet, and émigré works upon which he drew. In English. Units: 6.

RUSS 314
Chekhov (in English)
The course focuses on the work, world, and influence of Anton Chekhov. Topics may include "Chekhov and the Russian Short Story," "Chekhov and Modern Russian Drama," "Chekhov on the Silver Screen," and "Chekhov and the West." Taught in English. Russian majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in Russian. Units: 6.

RUSS 320
Topics in Russian Film (in English)
This course explores facets of the development of Russian film in its historical and cultural context. Topics may include: "The Golden Age of Soviet Film," "The Cinema of Tarkovsky," and "Film as Propaganda." Taught in English. Russian majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in Russian. Units: 6.

RUSS 323
Topics in Russian History and Culture (in English)
An interdisciplinary course examining the relationship between politics and culture in Russia since the 18th century through the close analysis of a specific historical theme. Emphasis is placed on reading and discussing literary texts, historical primary sources, and, where applicable, watching films. Possible themes include: Power and Culture in the Russian Revolution, 1900-1936; The Soviet 1960s; and The Agony of Populism: Terrorism and Literature in Russia's Nineteenth Century. Not open to students who have previously received, or need to receive credit for HIST 423. Units: 6.

Also listed as History 323

Prerequisite: Sophomore standing and one course in Russian language, literature, or history

RUSSIAN

RUSS 350
Kurgan Exchange Term
Courses in Russian phonetics, grammar, conversation, translation, literature, and folklore taken at Kurgan State University in Russia. Offered every year. Units: 21.

Prerequisite: Two years of college Russian or permission of department faculty

RUSS 361
Survey of 19th- and 20th-Century Russian Prose
Primary goals are to read, discuss, and analyze selected short stories and novel excerpts by some of Russia's major writers. Units: 6.

Prerequisite: Two years of college Russian

RUSS 390, 590, 690
Tutorial Studies in Russian
Advanced work, in Russian, arranged and carried out in consultation with the faculty. Topics depend on the student's interest, the instructor, and the subject. Tutorials are not substitutes for courses offered elsewhere in the curriculum. Units: Variable.

Prerequisite: Counter Registration Required.

RUSS 191, 391, 591, 691
Directed Study in Russian
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

RUSS 195, 395, 595, 695
Internship in Russian
An opportunity for students to apply their Russian language skills in business, government, and the non-profit sector on the regional, national, and international levels. Arranged in collaboration with and supervised by a member of the department. Includes discussion, report, and/or portfolio. Advance consultation and application required. Credit may be given for internships completed during a period of study abroad. Units: 3.

Prerequisite: Counter Registration Required.

RUSS 399, 599, 699
Independent Study in Russian
Individualized advanced research carried out in consultation with a faculty member. Students considering an honors project in their senior year should register for an upper-level independent study for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

SPANISH

Professor: Fares (chair)
Associate professors: Tapia, Vilches
Assistant professor: Allan
Instructors: Herrera, Palomino

Offerings in the Spanish department include a wide range of courses in the language, cultures, and literatures of Spain and Latin America. All readings, class discussions, and written work in courses beyond the intermediate level (Spanish 201) are in Spanish, unless specified otherwise. At the advanced level, students examine a variety of significant language and cultural issues through intensive reading, writing, listening, and speaking in Spanish. This preparation provides the necessary background for careers in foreign language teaching, in bilingual education, in government service, and in the international marketplace and for graduate study in such fields as languages, library science, or literature, to name a few. Spanish is already the second language of business in the United States, and, in conjunction with another area of specialization, the competence gained in the Spanish major program prepares the student for careers in fields such as international business and commerce, law, and communications.

Goals
The student who receives a major in Spanish has learned the following skills and knowledge: to develop and improve the student's ability to communicate; to know and understand different cultures through their literatures, visual arts, films, and other cultural artifacts; to establish connections with additional bodies of knowledge, cultures, and peoples; to make comparisons between Spanish and his/her native language, and between the cultures in Spanish-speaking countries and his/her own culture; in short, to communicate and to participate critically in multilingual communities. These goals, which follow the 5c's national standards, are attained through a reasonably high competency in the Spanish language and through the study of Latin American and Peninsular literatures and cultures. From the beginning, Spanish is used exclusively in the classroom and, except where specified, all class discussion, essays, and examinations are conducted in Spanish.

2010-2011 Course Catalog

Required for the Spanish major

- Ten standard courses (or a minimum of 60 units) above the level of Spanish 202, to include one 300-level course, one 400-level course, two surveys of literature, two 500-level courses (in addition to the two surveys), and four electives. The electives can include one 300-level course. The rest must be taken at the 400 level and above. They may include up to six units of internship and up to six units from approved courses outside the department, chosen from the following courses:
    - Art History 230: *Baroque Art*
    - Art History 270-1: *Latin American Visual Art*
    - Education 563: *Foreign Language Methods*
    - History 155: *Gender in Latin American History 1490-1800*
    - History 178: *Colonial Latin American History*
    - History 179: *Modern Latin American History*
    - History 260: *Culture and Power in Renaissance Europe*
    - History 261: *Rebellion and Discipline in Reformation Europe*
    - History 422: *Revolt and Revolution in Latin America*
    - Linguistics 150: *Introduction to Linguistics*

    - English 150: *Literary Analysis*
- Approval of completed *Senior Experience*: Spanish Multimedia Portfolio is also required
- At least four of the advanced courses must be taken on the Appleton campus.

Required for the Spanish minor Six standard courses (or a minimum of 36 units) above the level of Spanish 202, to include one 300-level course, one 400-level course, one survey of literature, one 500-level course (in addition to the survey), and two electives. The electives can include one 300-level course. The rest must be taken at the 400 level and above. They may include up to six units of internship or up to six units from approved courses outside the department. A C average in the minor is required.
At least three of the advanced courses must be taken on the Appleton campus.

Teaching Certification
Teaching certification in Spanish The Spanish department offers a course of study that prepares its majors to teach Spanish at the elementary and secondary level. Students interested in becoming licensed to teach Spanish, K-12, should plan to complete the major and should consult with the education department about certification requirements.

Study abroad
The department recommends that majors and minors spend time studying in a Spanish speaking country and advises them to view Lawrence's programs in Latin America or Spain as a way of fulfilling and complementing departmental requirements. Non-majors with sufficient linguistic preparation are also encouraged to participate in these programs. Lawrence University offers a variety of off-campus courses in languages and in other disciplines. Please contact the department chair or the off-campus programs office at International House for more information.

Numbering
At the beginning and intermediate levels, courses are numbered to indicate relative difficulty, the lowest numbers identifying those that require the least proficiency in Spanish. Courses numbered 101-202 are primarily language courses. They introduce the student to the most important grammatical concepts and linguistic skills. Courses numbered in the 300s provide continued practice in the language and introduce the student to literary analysis and the major literary genres. The 400-level courses provide continued practice in all four language skills and deal with the culture and civilization of Spanish-speaking countries. Courses at the 500 level focus on literary and cultural analysis. Capstone courses (600s) deal with topics explored in 500-level courses, bringing together all the areas of knowledge and proficiency in order to explore different topics. Tutorial studies and independent projects can be pursued in courses numbered in the 90s, with approval of the department chair.

Native speakers are encouraged to take Spanish courses above 400; they will not be allowed to take 300-level courses.
Note: The department does not offer DS/Tutorials/IS below the 300-level.

SPANISH

Senior Experience in Spanish

Spanish Multimedia Portfolio

The Spanish Department's *Senior Experience* consists of a Multimedia Portfolio which provides evidence that the students, while enrolled in the program, have developed a number of the qualities and skills essential to their future success. The Portfolio is a collection of evidence that constitutes a compelling argument that a student is proficient and has made steady progress toward a goal. The portfolio serves as a measure of students' improvement by allowing comparisons between early class assignments (audio or written) and later ones, so that students can gauge their progress and focus on the development of specific skills.

Students pursuing double majors, double degrees, and education certification, are strongly encouraged to consult with their advisors and relevant department chairs to plan their overall senior experience as early as possible, especially if they are interested in pursuing an interdisciplinary capstone that integrates their interests in both majors, or combines their student teaching with a project in their major.

By Friday of the third week of their final term prior to graduation Spanish majors are required to submit to the Department for approval the portfolio of revised written work that they have done in departmental courses at Lawrence University or abroad. Spanish Department faculty members assigned by the chairperson will evaluate the portfolio and communicate the evaluation to the students by the seventh week of the term. Unapproved portfolios must be revised before the end of the term, and successful completion of this requirement is a condition for completion of the major.

Portfolio Requirement

A portfolio of students' work should consist of the following:

1. A cover letter, in Spanish, which will specify the following:
    a. An Individualized Portfolio Theme
    b. A description of the content of the portfolio
    c. A reflective statement, in Spanish, of at least two pages, in which the student:
        i. evaluates his/her development during the years as Spanish majors,
        ii. justifies the selection of materials for the portfolio,
        iii. links the samples to their interests, and
        iv. reflects on the improvement gained throughout his/her career at Lawrence
    d. This part of the portfolio is expected to be error free.
2. A list of courses taken for the major.
3. A minimum of 15 pages written in Spanish from three different courses, 300-level and above, to be chosen by the student. One of them revised and as originally submitted, the other two, revised.
4. Two oral samples (two-minutes each) prepared independently by the student in a computer lab.
    a. A reading of a text in Spanish
    b. A presentation with a multimedia site approved by the department (see current information in Moodle) about an off-campus experience (study abroad, internship, etc.), with no fewer than five student-taken photos with a recorded, voice-over commentary in Spanish, done by the student.
        i. After the presentation is completed, it will be shared it with the Spanish department faculty.

ii. When the presentation is approved by departmental faculty, it will become a part of a rotating showcase of students' experiences made available to on- and off- campus communities through departmental or Senior Experience Web sites.
iii. Students will use their own visuals (photos or short video clips), whenever possible.
iv. No third-party visual materials (e.g., photos from commercial guidebooks, or other people's photos from Flickr or Facebook) may be used as part of the project, without proper attribution and permission from the copyright owner.

The portfolio should be presented in electronic format. Students should familiarize themselves with the departmental requirement at the time of declaring the major. *Note*: Students will take an Independent Study when presenting the Portfolio Courses

Courses

SPAN 101
Beginning Spanish
An introduction to Spanish. Special emphasis on understanding, speaking, reading, and writing. Students work on pronunciation and vocabulary-building. This course may not be taken on a Satisfactory/Unsatisfactory basis. Units: 6.

SPAN 102
Beginning Spanish
A continuation of Spanish 101 with intensive practice in the language skills. Some use of cultural materials. This course may not be taken on a Satisfactory/Unsatisfactory basis. Units: 6.

Prerequisite: SPAN 101, its equivalent, or consent of instructor

SPAN 200
Intensive Spanish 1, 2, and 3
An introduction to Spanish from the novice to the intermediate level. Special emphasis on understanding, speaking, reading, and writing. Students work on pronunciation, vocabulary-building, grammar and communicative skills. Completion of this course is the equivalent of SPAN 101, 102, and 201. Offered in the summer term only. This course may not be taken on a Satisfactory/Unsatisfactory basis. Units: 18.

Prerequisite: Registration for Summer 2011: Interested students must contact the Registrar's Office to register. will be open from Wednesday, May 12, through Tuesday, May 25.

SPAN 201
Intermediate Spanish
A comprehensive review of language skills with emphasis on mastery of forms and structures. Selected readings serve to develop conversational and writing skills. This course may not be taken on a Satisfactory/Unsatisfactory basis. Units: 6.

Prerequisite: SPAN 102, its equivalent, or consent of instructor

SPANISH

SPAN 202
Intermediate Spanish
A continuation of Spanish 201. Comprehensive review of language skills with emphasis on discussions in Spanish and on acquisition of language skills needed for advanced study. Selective review of forms and structures. Units: 6.

Prerequisite: SPAN 201, its equivalent, or consent of instructor

SPAN 320
Introduction to Literary Texts
A bridge between intermediate and advanced courses, with readings from across the centuries of Latin American and Spanish literature. Reading and composition tasks prepare the student for the literature courses required for the minor and the major. Intensive reading practice using short texts from a variety of genres (short stories, fables, fairy tales, poems, and non-fiction). Includes grammar review and vocabulary building. Not open to native speakers of Spanish. Units: 6.

Prerequisite: SPAN 202, its equivalent, or consent of instructor. Not open to native speakers of Spanish

SPAN 330
Introduction to Film
A bridge between intermediate and advanced courses. Intensive discussion, reading, and writing practice using films from a variety of genres (documentaries and feature films, including film adaptations of stories, novels, and plays in Spanish). Emphasis on the analysis of film components and structure and, where relevant, on the interconnections between literary texts and film. Not open to native speakers of Spanish. Units: 6.

Also listed as Film Studies 330, Theatre Arts 352

Prerequisite: SPAN 202, its equivalent, or consent of the instructor; not open to native speakers of Spanish.

SPAN 340
Spanish Phonetics
Spanish Phonetics will immerse students in the pronunciation and general phonetics of the Spanish language as it is spoken in Spain and Latin America. The course will help students to perfect their accent in Spanish and make them aware of the different accents of spoken Spanish. It also will serve Conservatory of Music students who desire to practice their diction in Spanish. Taught in Spanish. Course does not count towards the humanities general education requirement for B.A. and B.A./B.Mus. students. Not open to native speakers of Spanish. Units: 6.

Also listed as Linguistics 375

Prerequisite: SPAN 202, its equivalent, or consent of instructor; not open to native speakers of Spanish

SPANISH

SPAN 341
Spanish Phonetics (in English)
Spanish Phonetics will immerse students in the pronunciation and general phonetics of the Spanish language as it is spoken in Spain and Latin America. The course will help students to perfect their accent in Spanish and make them aware of the different accents of spoken Spanish. It also will serve Conservatory of Music students who desire to practice their diction in Spanish. Taught in English. Course does not count towards the humanities general education requirement for B.A. and B.A./B.Mus. students. Not open to native speakers of Spanish. Units: 6.

Also listed as Linguistics 376

Prerequisite: Sophomore standing or consent of the instructor

SPAN 345
Advanced Grammar Studies
In-depth study of grammar, syntax, and composition that builds on concepts learned in the intermediate courses. Problem areas, particularly at the advanced level of the language, are studied systematically. Course does not count towards the humanities general education requirement for B.A. and B.A./B.Mus. students. Units: 6.

Also listed as Linguistics 374

Prerequisite: SPAN 202, its equivalent, or consent of the instructor

SPAN 400
Latin American Civilization and Culture
A broad introduction to the culture of the Latin American continent and its relations to North American culture. The course presents Latin American civilization, history, economic and political situation, and diverse culture. Emphasis is placed on high cultural manifestations such as art and literature, as well as on the everyday habits of the people. Recommended for students who plan to participate in one of our study-abroad programs in Latin America. Units: 6.

Also listed as Ethnic Studies 480

Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor

SPAN 405
Spanish Civilization and Culture
An overview of Spanish history followed by examination of various aspects of Spanish culture. A broad introduction to the culture of Spain and its relations to North American culture. The course presents Spanish civilization, history, economic and political situation, and diverse culture. Emphasis is placed on high cultural manifestations such as art and literature, as well as on the everyday habits of the people. Recommended for students who plan to participate in one of our study-abroad programs in Spain. Units: 6.

Also listed as Ethnic Studies 481

Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor

SPANISH

SPAN 410
Gender, Politics, and Current Events in Latin America
A critical analysis of current events in Latin America with a focus on gender and political issues. Through films, magazine articles, fiction, and selected radio and television broadcasts from Latin America, students will study major events that relate and give expression to the cultural mores of Latin Americans within the realm of gender and politics. The course allows students to continue to develop their oral communication skills in the target language and, with a wide range of topics and interests, to work toward an understanding of gender issues and political events that have shaped and transformed Latin America. Units: 6.

Also listed as Gender Studies 410

Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor

SPAN 415
Gender, Politics, and Current Events in Spain
A critical analysis of current events in Spain with a focus on the politics of gender, class, and race. Through selected films, magazine articles, fiction, and media broadcasts from Spain, students will study major problems that affect Spanish society today. The course allows students to continue to develop their oral communication skills in the target language and, with a wide range of topics and interests, to work toward an understanding of issues and political events that affect present-day Spain in the wider context of the European Union. Units: 6.

Also listed as Gender Studies 412

Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor

SPAN 510
Survey of Peninsular Spanish I: Medieval, Renaissance, and Baroque
An introduction to Medieval, Renaissance, and Baroque Spanish literature, culture, and society. Reading and discussion of poetry, prose, and theatre from Spain in their historical and cultural contexts. Introduction to basic concepts of literary theory. Texts, discussion, and written assignments in Spanish. Additional materials such as films and paintings may be used for class discussions in order to contextualize readings. Units: 6.

Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

SPAN 511
Survey of Peninsular Spanish Literature II: Romanticism through 20th Century
An introduction to Romanticism, Realism, Modernism, Generations of ’98 and ’27, and Post-Civil War Spanish literature, culture, and society. Reading and discussion of poetry, prose, and theatre from Spain in their historical and cultural contexts. Introduction to basic concepts of literary theory. Texts, discussion, and written assignments in Spanish. Additional materials such as films and paintings may be used for class discussions in order to contextualize readings. Units: 6.

Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

SPANISH

SPAN 520
Survey of Latin American Literature I
A study of texts from Pre-Columbian and Spanish-speaking cultures from the 15th to 19th centuries, the period of "discovery writing" of Spanish colonies in Latin America, focusing on development and elaboration of genres and on the search for cultural and political emancipation from Spain. Units: 6.

Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

SPAN 521
Survey of Latin American Literature II
A study of major Latin American writers and literary movements from the period of Independence (ca. 1810) to the 20th century. Units: 6.

Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

SPAN 535
Topics in Literature and Culture
Topics for special study in Spanish of Peninsular and Latin American literatures and cultures. Topics in this series vary from year to year, according to students' and instructor's needs and interests. The course may be repeated with consent of the instructor, if the topic has changed. Taught in Spanish. Units: 6.

Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

SPAN 536
Topics in Literature and Culture (in English)
Topics for special study of Peninsular and Latin American literatures and cultures. Topics in this series vary from year to year, according to students' and instructor's needs and interests. The course may be repeated with consent of the instructor, if the topic has changed. Taught in English. Units: 6.

SPAN 546
Women's Writings
A course on women's writing from different times and Spanish-speaking cultures. Content varies according to the instructor's choices. It will emphasize theoretical approaches to women's writings and closely read relevant authors. Taught in Spanish. Units: 6.

Also listed as Gender Studies 549

Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

SPAN 550
Cervantes: Don Quijote
Close reading and discussion of *Don Quijote,* Parts I and II. Attention is given to the social and political context of the work. Units: 6.

Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

SPANISH

SPAN 555
20th-Century Spanish Fiction
A study of modern Spanish fiction in post-Franco Spain through works dealing with issues of memory and national identity. Authors include Juan Marsé, Eduardo Mendoza, Manuel Vázquez Montalbán, Manuel Rivas, and Nuria Amat. Units: 6.

Prerequisite: One Spanish 400-level course, its equivalent, or consent of instructor

SPAN 560
The Romance Languages and Their Histories (in English)
An introduction to the development of Romance languages from Latin. Emphasis on a comparative study of the structures of the modern Romance languages. Taught in English. Units: 6.

Also listed as Linguistics 510, Classics 520

Prerequisite: Knowledge of Latin or a Romance language beyond the intermediate level or consent of instructor

SPAN 566
Hispanic Issues
This course covers the main cultural issues in the contemporary Hispanic world. It concentrates on both the Hispanics of Latin America and those of the United States. Through theoretical materials as well as literature, film, historical documents, testimony, etc., this course addresses a variety of subjects related to the Hispanic culture. Taught in Spanish. Units: 6.

Also listed as Ethnic Studies 583

Prerequisite: One 400-level Spanish course, its equivalent, or consent of instructor

SPAN 570
Narrative: Text and Theory
An advanced study of narratives related to the conquest and colonization of America in Spanish (primarily literature), alongside a survey of theoretical approaches to narrative. Emphasis on the application of key concepts in literary and postcolonial theory to selected texts. Taught in Spanish. Units: 6.

Prerequisite: One literary survey course (e.g., SPAN 510, SPAN 511, SPAN 520, SPAN 521) or equivalent, or consent of instructor

SPAN 575
Latin American Visual Art (in English)
The course introduces the cultures of Latin America through a survey of its major movements and artists from the early 19th century to the present. Image-based lectures will be accompanied by discussion of visual and thematically related texts (*i.e.,* biographies, letters, scholarly articles) and carefully selected fragments of videos. Taught in English. Units: 6.

Also listed as Art History 270

SPAN 576
Latin American Visual Art
The course introduces the cultures of Latin America through a survey of its major movements and artists from the early 19th century to the present. Image-based lectures will be accompanied by discussion of visual and thematically related texts (*i.e.,* biographies, letters, scholarly articles) and carefully selected fragments of videos. Taught in Spanish. Units: 6.

Also listed as Art History 271

Prerequisite: One 400-level Spanish course, its equivalent, or consent of the instructor

SPAN 390, 590, 690
Tutorial Studies in Spanish
Topic of study and the term's work depend on the interest of the student and the instructor and on the subject matter. Tutorials are not substitutes for courses but opportunities to pursue topics suggested by courses. Units: Variable.

Prerequisite: Counter Registration Required.

SPAN 191, 391, 591, 691
Directed Study in Spanish
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

SPAN 195, 395, 595, 695
Internship
An opportunity for students to apply their Spanish language and culture skills in business, government, and the non-profit sector, on the regional, national, and international level. Arranged in collaboration with and supervised by a member of the department. Includes readings, discussions, and a report and/or portfolio. Internships in Spanish-related fields are available during the summer or the academic year and may carry academic credit if they meet the guidelines for academic internships and receive prior approval from the Spanish department chair. Units: Variable.

Prerequisite: Counter Registration Required.

SPAN 399, 599, 699
Independent Study in Spanish
A thorough investigation of a topic of the student's choice, carried out in consultation with an instructor. Recent independent studies in Spanish have included: Chicano Identity in Chicano Literature, Feminism in the Writings of Isabel Allende, and Inca Religion in Colonial Literature. All independent studies in Spanish must be approved in advance by the Spanish department chair. Units: Variable.

Prerequisite: Counter Registration Required.

THEATRE ARTS

Professor: Troy (J. Thomas and Julie E. Hurvis Professorship in Theatre and Drama, chair)
Associate professors: Frielund*, Privatt (James G. and Ethel M. Barber Professor of Theatre and Drama)
Lecturer: Leonard

* On leave Term(s) II

Students arrive at Lawrence with a wide variety of theatre experiences and nearly as wide a set of expectations. Most have had a high-school experience of working in theatre productions. Some see their college years as the first step toward a career in theatre. Others see theatre as a rewarding co-curricular activity to complement their college experience, and they hope to continue enjoying that involvement. To meet the interests of the first group, the Department of Theatre Arts has designed a curriculum that allows each student to deepen his or her general knowledge of the field while beginning the process of specialization within a particular focus area. To meet the expectations of the second group, auditions and other production assignments are open to all students, regardless of their major.

Because the study of dramatic art requires a grounding in the study of production methods, past and present, and must be intimately connected to and supported by the study of theatre history and dramatic literature of various periods, the department has developed a core curriculum in those areas required of all majors.

Additionally, students are invited to further explore an area of concentration or to continue a generalist's study of dramatic art. Areas of concentration include performance; design and technical theatre; and dramatic theory, history, and literature. We expect our majors to contribute to each area of the curriculum, to integrate their whole liberal arts exploration into their theatre studies, and to consistently participate in production — on stage, backstage, and in dramaturgical preparation.

Typically, majors complete most of their studies in the core curriculum early in their junior year. At that time, students begin to work toward a finalizing senior project in that area. The senior project is required of all majors and is designed to exhibit the student's strengths in the area in which he or she hopes to continue studies or seek employment. Students anticipating graduate study in an area of concentration should consult with their advisor to ensure that their auditions, résumés, or portfolio presentations are appropriately prepared. In addition, students are strongly encouraged to participate in one or more off-campus programs, such as the Lawrence London Centre, the Gaiety School of Acting in Dublin, or the ACM Chicago Arts Program, to deepen their understanding of the various areas of concentration prior to designing their senior projects. Students hoping to become certified as secondary-school teachers of theatre should consult with an advisor in the Department of Education to ensure that they have completed the necessary courses for that certification. Additional details about certification are contained on the education department's website.

THEATRE ARTS

2010-2011 Course Catalog

Core curriculum — required of all theatre arts majors

1. Theatre Arts 187: *Acting I*
2. Theatre Arts 212: *Theatre Traditions I: Greeks through the 18th Century*
3. Theatre Arts 224: *Theatre Traditions II: Romanticism through the Present*
4. Theatre Arts 231: *Introduction to Design for the Theatre*
5. Theatre Arts 327: *Playscript Analysis*
6. Six terms of participation in either Theatre Arts 355: *Theatre Production Laboratory* or Theatre Arts 357: *Musical Theatre Production Laboratory*. Normally granted at one unit per term of participation.
7. Four additional courses in a focus area or courses across focus areas to continue a generalist approach.
8. Senior Project

Focus areas

Performance
Additional courses in performance study include Acting II, Play Directing, and 12 additional units in performance — related courses.

Design and Technical Theatre
Additional courses include Stagecraft; costume, set, or lighting design; and a course in theatre technology and must include *Advanced Design Studio*.

Dramatic Theory, History, and Literature
Dramatic Theory and Criticism and an additional course in theatre history are required. Then students will take an additional 12 units of dramatic literature in the Departments of Theatre Arts or English or in a foreign language department. We urge students who intend to pursue graduate studies in this area to continue their foreign language studies to the level of advanced proficiency.

Required for the theatre arts minor

1. Theatre Arts 111: *Introduction to the Theatre*
2. Theatre Arts 113: *Stagecraft*
3. Theatre Arts 327: *Playscript Analysis*
4. Theatre Arts 212 or 224: *Theatre Traditions*
5. Theatre Arts 187: *Acting I*
6. Theatre Arts 477: *Acting II* or Theatre Arts 231: *Introduction to Design for Theatre*
7. Theatre Arts 355 or 357: *Theatre Production Laboratory* (3 terms of participation, normally granted at one unit per term of participation)
8. C average in the minor

THEATRE ARTS

***Senior Experience* in Theatre Arts**
The required Senior Project is a cumulative project that reflects each student's specific interests, and the wide range of activity in our department. While majors often begin the planning process for their Senior Project with their advisor during sophomore year, proposals to the department are due late junior year. A wide variety of options are available as valid senior projects. They include:

- creating a major acting role and documenting your efforts,
- directing a one–act play (up to 70 minutes),
- set, lighting, costume, or sound design for a production,
- technical direction or stage management for a production,
- creating and teaching curriculum for primary or secondary students in cooperation with Appleton area schools,
- writing a play and producing a reading of it for a general audience,
- or more scholarly activities such as writing on an aspect of theatre history for presentation or publication.

Projects that require use of one of the department's performance spaces must submit a proposal addressing the following:

- the requirements and challenges of the project including impact on and intersection with the department's ongoing activity,
- the preparation (course and production work) that has prepared you to successfully complete the project,
- the academic, artistic, and personal goals you hope to achieve with your project,
- request for space including preferred term and special production needs.

As theatre is a collaborative art form, the senior project is often a shared experience with other seniors; the department encourages groups of rising seniors to propose joint efforts.

The department welcomes project proposals involving shared experiences with other departments. The senior project can be tailored to fit the needs of a student seeking secondary certification.

THEATRE ARTS

Courses

THAR 111
Introduction to the Theatre
A survey of the traditions of dramatic form and the contributing arts of the theatre presented in historical context. Students read representative playscripts and attend performances. *Also offered at the London Centre.* Units: 6.

THAR 135
Stagecraft
An introduction to the technical aspects of theatre production. Laboratory experience in scenic construction and rigging, painting, lighting, sound, backstage organization, and management. Units: 6.

THAR 143
Movement for the Theatre: Fundamentals of Movement
Movement for the Theatre introduces students to the basic movement and gestural vocabulary of the dance discipline and promotes a fundamental understanding of how dance and movement serve as one of the contributing arts to the theatre. In each section, emphasis will be placed on basic technique, historical context, and their relationship to common theatre, musical, and opera production practices. Recommended for students who wish to participate in theatre, opera, and musical productions. Only 6 units of *Movement for the Theatre* (any type) can count toward the theatre arts major. Units: 3.

THAR 145
Movement for the Theatre: Ballet
Movement for the Theatre introduces students to the basic movement and gestural vocabulary of the dance discipline and promotes a fundamental understanding of how dance and movement serve as one of the contributing arts to the theatre. In each section, emphasis will be placed on basic technique, historical context, and their relationship to common theatre, musical, and opera production practices. Recommended for students who wish to participate in theatre, opera, and musical productions. Only 6 units of *Movement for the Theatre* (any type) can count toward the theatre arts major. Units: 3.

THAR 147
Movement for the Theatre: Modern Dance
Movement for the Theatre introduces students to the basic movement and gestural vocabulary of the dance discipline and promotes a fundamental understanding of how dance and movement serve as one of the contributing arts to the theatre. In each section, emphasis will be placed on basic technique, historical context, and their relationship to common theatre, musical, and opera production practices. Recommended for students who wish to participate in theatre, opera, and musical productions. Only 6 units of *Movement for the Theatre* (any type) can count toward the theatre arts major. Units: 3.

THEATRE ARTS

THAR 149
Movement for the Theatre: Social Dance
Movement for the Theatre introduces students to the basic movement and gestural vocabulary of the dance discipline and promotes a fundamental understanding of how dance and movement serve as one of the contributing arts to the theatre. In each section, emphasis will be placed on basic technique, historical context, and their relationship to common theatre, musical, and opera production practices. Recommended for students who wish to participate in theatre, opera, and musical productions. Only 6 units of *Movement for the Theatre* (any type) can count toward the theatre arts major. Units: 3.

THAR 170
Shakespeare London
Students will study several plays by William Shakespeare selected from among the current offerings by the Royal Shakespeare and other companies. Discussions will address the plays themselves, production techniques, and the audiences to whom they appeal. Students are required to attend performances of the plays under study. *Offered at the London Centre.* Units: 6.

Also listed as English 170

Prerequisite: Must be attending Lawrence London Centre

THAR 187
Acting I
We present a demystified, participatory approach to the craft of acting. Using the methods of Viola Spolin, students master the fundamental concepts of Stanislavsky and explore acting tools in the traditions of Grotowski and Meisner. Units: 6.

Prerequisite: Freshman or sophomore standing or consent of instructor

THAR 212
Theatre Traditions I: Greeks Through the 18th Century
A survey of theatre in its cultural context from its Greek origins through the 18th century. Extensive readings from the dramatic literature of each period supplement the study of the physical theatre and production practices. Units: 6.

Prerequisite: Sophomore standing or consent of instructor

THAR 224
Theatre Traditions II: Romanticism Through the Present
A survey of theatre in its cultural context from Romanticism through the present day. Extensive readings from the dramatic literature of each period illustrate the ideas, aesthetic values, and staging innovations that led to the theatre of the 21st century. Units: 6.

Prerequisite: Sophomore standing or consent of instructor

THEATRE ARTS

THAR 227
Voice and Diction
The spoken word is the most fundamental means of human communication. This course will introduce students to a practical approach to speech and voice dynamics in the tradition of Arthur Lessac. Units: 3.

THAR 229
Performance of Literature
A study of the principles involved in the oral performance of different forms of literature. Class involves practical platform training and experience with interpretive analysis and presentation. Units: 6.

THAR 231
Introduction to Design for the Theatre
A survey covering all aspects of visual design for the theatre. Emphasis on the necessary techniques of drafting, painting, and model making, with attention to aesthetic and practical problems of theatre design. Units: 6.

THAR 247
Responding to Art, or Dancing About Architecture
This course will guide students toward writing cogent and insightful reviews in the fine and performing arts, by cultivating a thoughtful, reflective, and creative attitude toward their aesthetic assumptions and expectations. Students will be exposed to the full range of London cultural offerings including theatre, opera, dance, concerts, poetry readings, art exhibitions, museum presentations, and architectural tours. The class will examine ancillary sources such as the popular press and scholarly reviews of performances and exhibits and then follow up these experiences and readings with discussions, guided responses, and directed journal writing to help students develop a personal aesthetic vocabulary. Toward the end of the course, students will be encouraged to find creative ways of expressing their responses to art including writing short plays or poems, collage art, or even dancing about architecture. The course is designed to broaden the range of fine arts majors, while enabling non-arts majors to cultivate a life-long habit of viewing and attending a variety of arts. *Offered at the London Centre.* Units: 6.

Prerequisite: Sophomore standing

THAR 260
The Art of Film
A study of the narrative and visual techniques in films selected from masterpieces of modern cinema. Readings in film history, film theory, and film aesthetics along with viewings of approximately ten movies from various periods and countries, by directors such as Eisenstein, Wells, Fellini, Kurasawa, and Truffaut. Units: 6.

Also listed as Film Studies 260

Prerequisite: Sophomore standing

THEATRE ARTS

THAR 276
Greek Drama
A study of selected dramas such as Aeschylus' *Prometheus Bound,* the *Agamemnon* and *Antigone* of Sophocles, and Euripides' *Bacchae* and *Medea.* Units: 6.

Also listed as Classics 465

Prerequisite: CLAS 225 or its equivalent

THAR 279
Fringe Theatre in London
This course will attempt to define Fringe Theatre (a movement started in 1968) and to categorize its main elements. The class shall attend a wide variety of plays and venues and come to an understanding of how the fringe has changed over the years. Discussions will address production techniques, the plays themselves, the audiences to whom they appeal, and to what extent the fringe is still an important theatrical force. Students are required to attend performances of the plays under study. *Offered at the London Centre.* Units: 6.

Prerequisite: Sophomore standing Must be attending Lawrence London Centre

THAR 285
Theatre for Young Audiences
A foundation to a growing field that ranges from theatre for a young audience to theatre with a young audience. This seminar-style course will give students who are interested in teaching theatre a strong foundation in the topic, including historical and pedgogical perspectives. Units: 6.

THAR 310
Alexander Technique I
The Alexander Movement Technique (AMT) is an educational method for finding easier use of self in daily activity. The technique offers us insight into our own mental processes and perceptions of our body's structure, and allows us to replace faulty habits with coordinated movement. Units: 3.

Prerequisite: Instructor approval is required. The instructor will talk with each student about the hands-on aspects of the technique and the code of ethics that governs the work.

THAR 327
Playscript Analysis
The playscript is a blueprint for a construction that uses the media of space, time, color, speech, and action to reflect from the stage images of what it means to be human. This course will explore both technical and creative ways to decipher the play text. Units: 6.

Prerequisite: Sophomore standing Recommended sophomore or junior year Recommended to be taken before THAR 527

THAR 351
Film in Germany (in English)
This course selects from 90 years of filmmaking in Germany. Films range from expressionism to Nazi propaganda and from escapist comedies to avant garde art. Learning to “read” German films critically also means finding out how to understand movies from Hollywood and beyond. Possible topics include “From Caligari to Hitler,” “German Literature as Film,” and “What Makes Lola Run.” Taught in English. German majors and minors may participate in a two-unit tutorial in which discussions and some course readings will be in German. Units: 6.

Also listed as German 357, Film Studies 357

THAR 352
Introduction to Film
A bridge between intermediate and advanced courses. Intensive discussion, reading, and writing practice using films from a variety of genres (documentaries and feature films, including film adaptations of stories, novels, and plays in Spanish). Emphasis on the analysis of film components and structure and, where relevant, on the interconnections between literary texts and film. Not open to native speakers of Spanish. Units: 6.

Also listed as Spanish 330, Film Studies 330

Prerequisite: SPAN 202, its equivalent, if consent of the instructor; not open to native speakers of Spanish.

THAR 355
Theatre Production Laboratory
Practicum in theatre production. May be taken for one or more terms; six terms required of theatre arts majors, three terms required of minors. May be taken by any student involved in theatre production. May be repeated for credit. Units: 1.

THAR 357
Musical Theatre Production Laboratory
Practicum in musical theatre. May be taken for one or more terms; can be used in partial fulfillment of the six terms of Theatre Arts 355 required of all theatre arts majors or the three terms of Theatre Arts 355 required of all theatre arts minors. May be repeated for credit. Units: 1.

THAR 377
Technologies in Theatre Production
Theatre designers execute their vision of the dramatic world by exploring the available technologies of the theatre. This course examines modern technological protocol for theatre production. Topics will include: safety and efficacy for lighting, sound, special effects. Units: 6.

Prerequisite: THAR 135 or consent of instructor

THAR 390
Tutorial Studies in Theatre Arts
Advanced work, arranged and carried out in consultation with an instructor. Units: Variable.

Prerequisite: Counter Registration Required.

THEATRE ARTS

THAR 423
History of American Dramatic Literature
A study of American theatre in its cultural context from its colonial beginnings to the present. Extensive readings of the works of principal playwrights. Units: 6.

Prerequisite: Sophomore standing or consent of instructor

THAR 425
Advance of the American Musical
A study of this uniquely American theatrical form as it develops in response to our culture throughout the 20th century and into the 21st. Ability to read music helpful, but not required. Units: 6.

Prerequisite: Sophomore standing or consent of instructor

THAR 432
Shakespeare
An introduction to Shakespeare's plays and their literary, historical, and theatrical context. Units: 6.

Also listed as English 425

Prerequisite: Junior standing, ENG 230, or consent of instructor

THAR 434
Restoration and 18th-Century Comedy
A study of English comedies as reflections of changing taste and thought in the period 1660-1800. Authors include Wycherley, Etherege, Congreve, Farquhar, Steele, Fielding, Goldsmith, and Sheridan. Units: 6.

Also listed as English 445

Prerequisite: Junior standing, ENG 230, or consent of instructor

THAR 436
Renaissance Drama
A study of eight to ten plays from the early modern period, excluding Shakespeare. Readings include Marlowe, Jonson, Middleton and Webster. Units: 6.

Also listed as English 435

Prerequisite: Junior standing, ENG 230, or consent of instructor

THEATRE ARTS

THAR 440
Modern Drama
Studies in some of the major playwrights in Europe, England, and America from the time of Ibsen to the present. Units: 6.

Also listed as English 490

Prerequisite: Junior standing, an intermediate course in English, or consent of instructor

THAR 477
Acting II
Continued, in-depth study of the elements covered in Theatre Arts 187 with added monologue, scenic work, and an introduction to acting Shakespeare. The department expects that students who take this course have had extensive performance experience between *Acting I* and *Acting II*. Units: 6.

Prerequisite: THDR/THAR 187 or consent of instructor

THAR 479
Styles of Acting
Study of the acting of a particular period or style, based on the techniques acquired in Theatre Arts 187. Units: 6.

Prerequisite: THDR/THAR 187 or consent of instructor

THAR 527
Play Directing
Examination of and practice in fundamental directing methods and techniques. In this course we focus on the directing tradition of Alexander Dean. Units: 6.

Prerequisite: THDR/THAR 187 or consent of instructor

THAR 541
Seminar in Technical Theatre
A seminar focusing on specialized technical areas of the theatre. Content varies to fit the availability of the technical staff. May be repeated as content changes. *Topic for Spring 2011: Scenic Art* Units: Variable.

Prerequisite: THDR/THAR 135, 231 or consent of instructor

THAR 551
Costume Design
The theory and practice of costume design for the stage, focusing on period style and presentation technique. Laboratory responsibility in the costume shop required as part of course. Units: 6.

Prerequisite: THDR/THAR 231 or consent of instructor

THAR 553
Stage Lighting
A study of basic lighting theory, design, and technique that enables students to assume responsibility, with knowledge and precision, for designing and executing lighting plots. Laboratory responsibility on lighting crews required as part of course. Units: 6.

Prerequisite: THDR/THAR 231 or consent of instructor

THAR 555
Set Design
A study of the role of the set designer in a theatrical production from the conceptual through the production phase. Emphasis on values of concept, inventive scenic solutions, and creative research as applied to a number of different dramatic styles. Laboratory responsibility in the scenic studio required as part of course. Units: 6.

Prerequisite: THDR/THAR 231 or consent of instructor

THAR 557
Sound for the Stage
An examination of the aesthetic and practical applications of sound creation and reinforcement as involved in all contemporary theatre performance. Laboratory experience on a sound crew is a required part of the course. Units: 6.

Prerequisite: THDR/THAR 135 or 231 or consent of instructor

THAR 573
Computing in Stage Design and Production
A study of the range of areas wherein computing supports the efforts of the contemporary designer, including CAD, modeling, rendering, and animation applications. The course involves hands-on laboratory work in computing. Units: 6.

Prerequisite: THDR/THAR 135 or 231 or consent of instructor

THAR 611
Dramatic Theory and Criticism
A study of dramatic theory and criticism from Aristotle to the present. Students, as theatre artists, research and apply concepts explored in class to playscripts. Units: 6.

Prerequisite: Sophomore standing or consent of instructor

THAR 627
Advanced Play Directing
Practical application of the principles learned in Theatre Arts 527. Students explore how Dean and Carra's Five Fundamentals of play directing are used to clearly express dramatic type and theatrical style. Extensive scene work, presentations, and final project for public performance. Units: 6.

Prerequisite: THDR/THAR 527 or consent of instructor

THEATRE ARTS

THAR 679
Advanced Design Studio
Further exploration of design and design techniques, including rendering and drafting, focusing on portfolio preparation, taking into consideration the specific interests and needs of each student participating. Units: 6.

Prerequisite: THDR/THAR 231 or consent of instructor

THAR390, 590, 690
Tutorial Studies in Theatre Arts
Advanced work, arranged and carried out in consultation with an instructor. Units: Variable.

Prerequisite: Counter Registration Required.

THAR 191, 391, 591, 691
Directed Study in Theatre Arts
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

THAR 195, 395, 595, 695
Internship in Theatre Arts
An opportunity for students to apply their theatre skills in business and the non-profit sector on the regional, national, and international levels. Arranged in collaboration with and supervised by a member of the department. Includes readings, discussion, report, and/or portfolio. Advance consultation and application required. Units: Variable.

THAR 399, 599, 699
Independent Study in Theatre Arts
Advanced work in directing, design, performance, or criticism, arranged in consultation with department. Units: Variable.

Prerequisite: Counter Registration Required.

UNIVERSITY COURSES

University Courses deal with subjects of interest and importance that are outside the purview of any given department. Usually interdisciplinary, University Courses call upon students and faculty to integrate ideas from sometimes disparate fields of knowledge. Alternatively, they provide opportunity for faculty members to present material of specific scholarly interest or expertise. Students from all disciplines may enroll in University Courses.

UNIC 101
Beginning Italian I
Students enrolled in this course will learn the basic skills of speaking and communicating, reading, and writing in the Italian language. Italian culture will be emphasized throughout the term. Audio-visual materials and computer-assisted programs will be available to students as part of the course. Units: 6.

UNIC 102
Beginning Italian II
Students enrolled in this course will continue learning the skills of speaking and communicating, reading, and writing in the Italian language. Italian culture will be emphasized. Compositions will aid students in further developing their skills in the Italian language. Audio-visual materials and computer-assisted programs will be available to students as part of the course. Units: 6.

Prerequisite: UNIC 101 or consent of instructor

UNIC 102
Beginning Italian II
Students enrolled in this course will continue learning the skills of speaking and communicating, reading, and writing in the Italian language. Italian culture will be emphasized. Compositions will aid students in further developing their skills in the Italian language. Audio-visual materials and computer-assisted programs will be available to students as part of the course. Units: 6.

Prerequisite: UNIC 101 or consent of instructor

UNIC 110
English as a Second Language – Freshman Studies I
A modified version of Freshman Studies 100 designed for CESA students with limited English proficiency. *Enrollment limited to students in the Waseda Visiting Student program.* Units: 6.

Prerequisite: Open only to students in the Waseda Visiting Student program

UNIC 115
ESL: English for Academic Purposes I
This course will offer non-native speakers of English the opportunity to further develop key academic language skills including: writing and structuring academic essays, discussion strategies, listening and note-taking skills, reading and vocabulary development. Additional language concerns will be addressed as needed. Units: 3.

UNIVERSITY COURSES

UNIC 116
ESL: English for Academic Purposes
A continuation of English for Academic Purposes I, this course gives non-native speakers of English additional experience developing written and oral academic language skills and understanding the conventions of American academic culture. Students will improve their ability to effectively express complex ideas in English with ease, accuracy and fluency. Units: 3.

UNIC 121
Beginning Arabic I
An introduction to Modern Standard Arabic. After students learn the alphabet and the sound system, they will get acquainted with the basic skills of speaking, understanding, reading and writing Modern Standard Arabic. The course includes a strong cultural component, with such items as films and music. Units: 6.

UNIC 122
Beginning Arabic II
A continuation of Beginning Arabic I. Students will continue working on the ability to perceive and produce the sounds out of which Arabic words are made, with further practice in the basic language skills. Particular emphasis will be placed on the cultural component. Units: 6.

Prerequisite: UNIC 121

UNIC 130
Public-Speaking Practicum
Emphasizes theory, skills, and practice of presentational speaking relative to a variety of forms of communication (particularly information and persuasion speaking) involving body, voice, and language. Units: 6.

UNIC 201
Intermediate Transitional Italian
Review of the basic skills of speaking and communicating, reading, and writing in the Italian language. Additional selected texts and compositions will reinforce previously learned material. Italian culture will be emphasized. Audio-visual and computer-assisted programs will be available to students as part of the course. Units: 6.

Prerequisite: UNIC 102 or consent of instructor

UNIC 203
British Crime Fiction
The course will offer a survey of the development of crime fiction in Britain from the mid-nineteenth century to the pre sent. Taught as a lecture/discussion class, it will also attempt to exploit the London setting to provide a physical context for some of the work under scrutiny. Students will be able to develop their analytical and writing skills, and should expect to achieve a good grasp of the characteristics of genre fiction; they should also be able to recognize the contribution that a study of these popular forms can make to developing a broader understanding of the values and concerns of the society within which they arise. Units: 6.

Prerequisite: Must be attending the Lawrence London Centre. Sophomore standing

UNIVERSITY COURSES

UNIC 206
English as a Second Language – English in the American University
An introduction to academic English at the university level designed for students with limited English proficiency. Students work to develop English proficiency in speaking, listening, reading, and writing through the exploration of different academic disciplines. *Enrollment limited to students in the Waseda Visiting Student program*. Units: 6.

Prerequisite: Open only to students in the Waseda Visiting Student program

UNIC 207
English as a Second Language – Speaking and Listening
This variable credit course focuses on developing speaking and listening skills in English. *Enrollment limited to students in the Waseda Visiting Student program.* Units: Variable.

Prerequisite: Open only to students in the Waseda Visiting Student program

UNIC 208
English as a Second Language – Advanced Communicative English
This course focuses on developing increased communicative competence in English as a second language. In addition, it introduces some of the components of communication and the conventions of discourse in English. *Enrollment limited to students in the Waseda Visiting Student program.* Units: 6.

Prerequisite: Open only to students in the Waseda Visiting Student program

UNIC 209
English as a Second Language – Experiential Language Learning
Development of English language proficiency in a specialized field of study. Students design and complete projects based on intensive exploration of a specific English-speaking environment, such as a university course or a community volunteer site. S/U only. *Enrollment limited to students in the Waseda Visiting Student program.* Units: Variable.

Prerequisite: Open only to students in the Waseda Visiting Student program

UNIC 210
Prize Fiction
A comparative study of recent winners of the American Pulitzer and British Booker Prizes in fiction. Authors read may include Smiley, Ondaatje, Shaara, Trevor, Lively, Coetzee, and Proulx. Lecture and discussion. Units: 6.

UNIC 211
Introduction to American Society I
An introduction to life in America and to academic life at an American university for foreign-exchange students. Students will explore American values, attitudes, and patterns of behavior through formal study, structured observation and interviews of Americans, and through the analysis of their everyday living and studying at Lawrence. *Enrollment limited to students in the Waseda Visiting Student program.* Units: 2.

Prerequisite: Open only to students in the Waseda Visiting Student program

UNIVERSITY COURSES

UNIC 212
Introduction to American Society II
An introduction to life in America and to academic life at an American university for foreign-exchange students. Students will explore American values, attitudes, and patterns of behavior through formal study, structured observation and interviews of Americans, and through the analysis of their everyday living and studying at Lawrence. *Enrollment limited to students in the Waseda Visiting Student program.* Units: 1.

Prerequisite: Open only to students in the Waseda Visiting Student program

UNIC 213
Introduction to American Society III
An introduction to life in America and to academic life at an American university for foreign-exchange students. Students will explore American values, attitudes, and patterns of behavior through formal study, structured observation and interviews of Americans, and through the analysis of their everyday living and studying at Lawrence. *Enrollment limited to students in the Waseda Visiting Student program.* Units: 1.

Prerequisite: Open only to students in the Waseda Visiting Student program

UNIC 220
The Ethical Lyricists
A study of contemporary life as represented in lyric poetry. Readings will include lyrics by Zbigniew Herbert, Philip Larkin, Adrienne Rich, and others. Lecture and discussion. Units: 6.

UNIC 221
Intermediate Arabic I
In this course, students will acquire new and more complex linguistic structures and be exposed to a wider range of written and oral texts, so that they may start speaking, reading and writing at a higher level. Selected newspaper articles and short stories will be introduced. The cultural component will be particularly emphasized. Units: 6.

Prerequisite: UNIC 122

UNIC 240
Modern Literature of Central Europe in Translation
Ethnic variations on the themes of love, death, and bureaucracy in the ruins of the Hapsburg Empire, including the bitter fate of small nations. Authors will include Roth, Andríc, Konrád, Borowski, Herbert, Kafka, Kundera, Wolf. Units: 6.

UNIVERSITY COURSES

UNIC 260
British Life and Culture
This compulsory course utilizes visiting speakers, site visits, small group fieldwork and short research projects to introduce students to contemporary life in London and the United Kingdom. Site visits usually include the Museum of London, Imperial War Museum, London Mosque, and a football match. Speakers have included religious leaders representing several different traditions and a homeless couple, among others. The course is designed so that the majority of work takes place during the single class meeting, allowing students the possibility of pursuing up to three elective courses. Units: 3.

Prerequisite: Must be attending the Lawrence London Center

UNIC 262
"The Fields Beneath": Discovering London's Histories
This interdisciplinary course aims to give students a thorough grounding in the chronology of London's development from Roman settlement on the periphery of Empire to 21st-century "World City." The use of contemporary literary and visual sources will serve both to develop students' historical imagination and to enable them critically to examine the concepts involved in the discipline of history itself. Alongside this historical approach, a theoretical examination of specific themes and topics will be used to explore the nature of "the town as palimpsest," a layered structure in which the past is never entirely obliterated by what succeeds it. Examples of such themes and topics might include, *inter alia,* religious observance, theatrical presentation, immigration, commerce, domestic life, and government. *Offered at the London Centre.* Units: 6.

Prerequisite: Must be attending the Lawrence London Centre.

UNIC 264
London Internship
Students in the internship program participate in this seminar meeting once per week and building upon the field study, lectures, and discussions in the British Life and Culture course. Students are expected to maintain a journal with substantial entries each week that critically reflect on their experiences from intercultural, cross-cultural, social, ethical, organizational, and interpersonal perspectives. Students are also required to complete short reflective essays and a final internship essay interrogating their experiences in terms of the course readings, class discussions in the seminar and the British Life and Culture course, and the broader issue of how a liberal arts-informed perspective frames one's experience in the workplace. Units: 6.

Prerequisite: Must be attending the Lawrence London Centre.

UNIC 300
Internship: Journalism and the Liberal Arts
Intensive study, under the direction of a faculty member, of topics related to a student's work on *The Lawrentian* and, in special cases, other local publications. The subject matter of a student's submissions to the paper will be explored through readings and discussion. Expectations include regular submissions to *The Lawrentian,* outside reading, and a final project or paper. Units: 3.

UNIVERSITY COURSES

UNIC 310
President's Seminar
Seminar offered in a special topic by the President. Units: 3.

Prerequisite: Sophomore standing and one faculty member recommendation

UNIC 410
Senior Studies
This course will allow interested seniors to revisit Freshman Studies. The class will reconsider four works from Freshman Studies as well as two new works recommended by the students themselves. The aim is to see if questions raised in the first year of college still resonate in the weeks before graduation. Units: 6.

Prerequisite: Senior standing

UNIC 470
Fringe Science
A course for advanced natural sciences and mathematics majors, who will use their knowledge of science to critically explore works of fringe science, including topics such as Capra's Tao of Physics and Talbot's Holographic Universe. Units: 6.

Prerequisite: PHYS 130 or PHYS 160, declared major in a natural science, and junior standing

CONSERVATORY OF MUSIC

Professors: Anthony**, Becker, K. Bozeman (Frank C. Shattuck Professorship in Music), S. Jordheim, Kautsky*, Levy, Michaels, Niblock, Richeson, Sturm (Kimberly-Clark Professor of Music), Taniguchi, Whitman, de Lerma
Associate professors: Bell, Biringer, J. Daniel, DeCorsey, George, Keelan, Koestner, Leigh-Post, Mast, McQuinn, Metcalf*, Michelic, Miller, Moss, Padilla, Stannard, Swan, Urness
Visiting associate professor: Sindberg
Assistant professors: Ceballos, Gu, Ito, Mizrahi, Sieck, Spears, Srinivasan
Visiting assistant professors: Gates, Helvering
Instructors: Benson, Boeckman, J. Bozeman, DiBella, Dies, S. McCardell, Planet, Skrupky, Tomboulian, Van De Loo
Lecturers: Boncher, Buchman (Academy of Music), Chau (Academy of Music), V. Daniel, Darling, Erickson, G. Grine, M. Grine (Academy of Music), Handford, S. Jordheim, McAllister, S. McCardell, Peplin, Perkins, Post (Academy of Music), Scheinberg (Lecturer in Music), Turner, Walby (Academy of Music), Washatka, Wysock
Post-doctoral fellows: Downing, Hardin, Mayrose
Artist-in-Residence: Duesing
Lecturers: Adnyana, Bieneman, Chao, Damp, Deaton, Eckstein, Kind, Krywosz, Rivers (Academy of Music), Sparks (Academy of Music)

* On leave Term(s) II; ** On leave Term(s) III

Music has been a prominent feature of life at Lawrence University since its founding in 1847; the first Bachelor of Music degree was conferred in 1892. Today, the conservatory curriculum affords students a unique blend of professional education in music and a liberal education, a combination that has produced outstanding composers, performers, scholars, and educators. Conservatory students are active in the academic and extracurricular life of the college, and college students avail themselves of the rich opportunities for music study and appreciation in the conservatory. The conservatory is an accredited institutional member of the National Association of Schools of Music.

Three separate courses of study lead to a degree in music: the Bachelor of Music degree with majors in performance, music education, or theory/composition; the five-year program that combines the Bachelor of Music degree with a Bachelor of Arts degree in a major other than music; and the Bachelor of Arts degree with a major in music (Please see the Bachelor of Arts degree requirements and the major and minor in music). All degrees in music offer the possibility of a student-designed major. Students interested in a student-designed major should consult the associate dean of the conservatory.

General information
All students are expected to be familiar with the policies and procedures set forth in departmental handbooks and guidelines and the *Conservatory Student Handbook* (www.lawrence.edu/ conservatory/handbook), all of which contain important information about recitals and departmental examinations and other rules governing student academic life within the conservatory.

Students who wish to pursue two music majors must petition the Conservatory Committee on Administration.

CONSERVATORY OF MUSIC

Studio assignments and course placement will be determined upon matriculation. Students are expected to meet with their faculty advisors on a regular basis to discuss progress and course selections. Regular consultation with faculty advisors is essential for students who wish to attend an off-campus program or are planning to complete both the Bachelor of Music and Bachelor of Arts degrees.

Students must consult their studio teachers in regard to all public performances, including appearances not scheduled by Lawrence University. Conservatory rehearsals and performances take precedence in the case of a conflict with external activities. Students may not teach on campus unless employed by the Lawrence Academy of Music.

Residence requirements
To qualify for a Lawrence University B.A. or B.Mus. degree, students are required to have a minimum of six terms in residence and earn 108 units (Lawrence foreign study programs, Associated Colleges of the Midwest programs, and other special arrangements under Lawrence sponsorship included). Nine terms in residence and 162 units are required for the five-year B.A. and B.Mus. double-degree program.

Students must be in residence on the Appleton campus until they have completed the *Freshman Studies* requirement.

The last three terms of work and a minimum of 54 units submitted for the graduation requirements must be done in residence unless a department (or departments, or advisory committee, where appropriate) previously has certified completion of the requirements for a major. This requirement, or one of its parts, may be waived by the admissions office in the case of incoming transfer students or by the Faculty Subcommittee on Administration in any other cases.

Bachelor of Music degree
The Bachelor of Music is a professional degree. Courses in music represent approximately two-thirds of the curriculum, while one-third is devoted to *Freshman Studies* and General Education Requirements.

In addition to academic policies and regulations detailed in this catalog, students in the conservatory are subject to policies and procedures detailed in conservatory department guidelines and the *Conservatory Student Handbook* (www.lawrence.edu/conservatory/handbook).

Admission to the degree
An entrance audition is required of all applicants for admission to the Bachelor of Music degree. Bachelor of Arts students who wish to become Bachelor of Music students must petition the Conservatory Committee on Administration for admission. Bachelor of Music students who wish to become Bachelor of Arts students must petition the University Faculty Subcommittee on Administration for acceptance into the Bachelor of Arts degree program. Such changes are not normally allowed before the end of the freshman year nor later than the beginning of the junior year.

Bachelor of Music students must complete the appropriate qualifying examination(s), normally by the end of the sophomore year.

CONSERVATORY OF MUSIC

Requirements for the Bachelor of Music Degree

1. Completion of a minimum of 216 units. The following music courses are used in the computation of the degree grade-point average but are excluded from the total of 216 units required for the degree: MURP 201, 202, 203, 301, 302 and MUTH 161, 162, 171, 172.
2. 2. Of the 216 units required to complete the degree, a student must present:
    a. a minimum of 144 units in music
    b. a minimum of 60 units in courses other than music.
    c. no more than 12 units from academic internships
    The additional 12 units may be selected from any department.

3. In the freshman year, 12 units of *Freshman Studies*.
4. Completion of the General Education Requirements:
    a. 6 units selected from courses designated as writing intensive
    b. International diversity. One of the following:
        i. 6 units selected from courses designated as either emphasizing global and comparative perspectives on the world or focusing on areas outside Europe and the United States.
        ii. 12 units selected from courses numbered below 200 in a single foreign language.
        This requirement may also be satisfied by attaining a score of 4 or 5 on an Advanced Placement examination or by passing a proficiency examination administered by a Lawrence University foreign language department.
        iii. Participation for one term in a Lawrence or affiliated off-campus study program held outside the United States

Note: While some music courses may satisfy General Education Requirements, a minimum of 60 units in courses other than music is required for the degree.

Stipulations pertaining to the General Education Requirements for the Bachelor of Music degree

A single course may be used to satisfy both requirement a. and requirement b. above. Credits granted pursuant to university policy for advanced placement or for transfer work may be used to fulfill General Education Requirement. Please see "Transfer Credit" for information about the application of transfer credits to requirements.

5. Completion of music core requirements:
    a. Music theory
        i. MUTH 151, 161, 171 or MUTH 201, 211, 221
        ii. MUTH 152, 162, 172 or MUTH 202, 212, 222
        iii. MUTH 251, 261, and 271
        iv. MUTH 252, 262, and 272
        v. MUTH 301, 311, and 321
    b. Music history
        i. MUHI 201 and 202
        ii. 12 units selected from courses in music history numbered 400 or above
    c. Keyboard skills: MURP 201, 202, 203 or MURP 301, 302
    d. Applied music individual instruction as specified under requirements for the major and areas of emphasis

   e. Ensemble study: a minimum of 12 units. Students are required to participate in an ensemble every term in which they are attending classes on the Appleton campus. Requirements for specific types of ensemble study (MUEN) are specified under requirements for majors and areas of emphasis.

6. Completion of a major in music — performance, music education, theory/composition, or student-designed — including all course and non-course requirements, such as recitals, qualifying examinations, etc. A student is expected to pass a qualifying examination after no more than six terms of study.
7. An academic record that meets the following standards:
   a. A 2.000 grade-point average in all Lawrence courses.
   b. A 2.000 grade-point average in the music major (all music courses and nonmusic courses required for the major) unless otherwise specified under the major requirements.
8. Completion of required terms and units in residence as specified by the university residence requirements.

CONSERVATORY OF MUSIC

The major in performance

2010-2011 Course Catalog

Piano

1. Piano performance: 54 units
    a. A minimum of 54 units in MUIN 301
    b. Presentation of a half recital during junior year and a full recital during senior year
2. Supporting courses for the major: 18 units
    a. MURP 451, 452: *Literature of the Piano I, II* (12 units)
    b. MUEP 301, 302: *Piano Pedagogy I, II* (6 units)
3. Keyboard skills: MURP 301, 302: *Functional Skills for Keyboard Majors I, II*
4. Ensemble: 12 units
    a. 3 units in major ensemble
    b. 3 units in chamber music
    c. 6 units in MUEN 250: *Supervised Accompanying*

Organ

1. Organ performance: 54 units
    a. A minimum of 54 units in MUIN 302
    b. Presentation of a half recital during junior year and a full recital during senior year
2. Supporting courses for the major: 9 units
    a. MURP 390: Tutorial *Survey of Organ Literature, Design, and Performance Practice* (3 units)
    b. Keyboard skills: MURP 301, 302: *Functional Skills for Keyboard Majors*
    c. MUEP 380: *Conducting Principles* (6 units)
3. Music theory/history/composition/arranging: 6 units from courses numbered 300 or above beyond degree requirements
4. Ensemble: 12 units
    a. 3 units in major ensemble
    b. 3 units in chamber music
    c. 6 units in major ensemble, chamber music, or supervised accompanying

Harpsichord

1. Harpsichord performance: 54 units
    a. A minimum of 54 units in MUIN 319
    b. Presentation of a half recital during junior year and a full recital during senior year
2. Supporting courses for the major: 7 units
    a. MURP 410: *Harpsichord Accompaniment (1 unit)*
    b. Keyboard skills: MURP 301, 302: *Functional Skills for Keyboard Majors I, II*
    c. MUEP 380: *Conducting Principles* (6 units)
3. Music theory/history/composition/arranging: 6 units from courses numbered 300 or above beyond degree requirements
4. Ensemble: 12 units
    a. 3 units in major ensemble
    b. 3 units in chamber music

   c. 6 units in major ensemble, chamber music, or supervised accompanying
5. General Education: French or German must be taken to fulfill the international diversity requirement

Voice

1. Voice performance: 54 units
   a. A minimum of 54 units in MUIN 303
   b. Presentation of a half recital during junior year and a full recital during senior year
2. Supporting courses for the major: 19 units
   a. MURP 271, 272, 273, 274, 275, 276: *vocal diction and technique series* (6 units)
   b. MURP 455: *Vocal Literature* (3 units)
   c. MUEP 371, 372: *Vocal Pedagogy* (4 units)
   d. MUEP 380: *Conducting Principles* (6 units)
3. Music theory/history/composition/arranging: 6 units from courses numbered 300 or above beyond degree requirements
4. Ensemble: 12 units
   a. 6 units in concert choir/women's choir
   b. 6 additional units in a major choral ensemble
   c. 6 units in opera theatre (MUEN 280: *Performance Skills for Singers* required, preferably in the first year)
5. General Education:
   a. completion of the degree requirements must include 12 units each of two of the following (or placement at the intermediate level): French, German, or Italian, taken for a grade
   b. Non-music courses must include THAR 187: *Acting I*

Strings: violin, viola, violoncello, doublebass

1. String performance: 60 units
   a. A minimum of 60 units in MUIN 304, 305, 306, or 307
   b. Presentation of a half recital during junior year and a full recital during senior year
2. Conducting: MUEP 380: *Conducting Principles* (6 units)
3. Music theory/history/composition/arranging: 6 units from courses numbered 300 or above beyond degree requirements
4. Ensemble: 18 units
   a. 12 units in symphony orchestra
   b. Chamber music: 6 units, 3 units of which must be completed after the student has passed the qualifying examination for the major

Classical guitar

1. Guitar performance: 60 units
   a. A minimum of 60 units in MUIN 308
   b. Presentation of a half recital during junior year and a full recital during senior year
2. Supporting courses for the major: 9 units
   a. MURP 311, 312, 313: *Fretboard Harmony for the Classical Guitarist I, II, III* (3 units)
   b. MUEP 380: *Conducting Principles* (6 units)

3. Music theory/history/composition/arranging: 6 units from courses numbered 300 or above beyond degree requirements
4. Ensemble: 12 units
    a. 3 units in major ensemble,
    b. 3 units in chamber music, and
    c. 6 units in major ensemble or chamber music

Winds: flute, oboe, clarinet, saxophone, bassoon, horn, trumpet, trombone, euphonium, tuba

1. Wind performance: 60 units
    a. A minimum of 60 units in MUIN 309, 310, 311, 312, 313, 314, 315, 316, 317, or 318
    b. Presentation of a half recital during junior year and a full recital during senior year
2. Conducting: MUEP 380: *Conducting Principles* (6 units)
3. Music theory/history/composition/arranging: 6 units from courses numbered 300 or above beyond degree requirements
4. Ensemble: 15 units
    a. 6 units in wind ensemble, 3 units of which must be taken after the student has passed the qualifying examination for the major, and
    b. 6 units in a major instrumental ensemble
    c. 3 units of chamber music

Percussion

1. Percussion performance: 54 units
    a. A minimum of 54 units in MUIN 320
    b. Presentation of a half recital during junior year and a full recital during senior year
2. Conducting: MUEP 380: *Conducting Principles* (6 units)
3. Music theory/history/composition/arranging: 6 units from courses numbered 300 or above beyond degree requirements
4. Ensemble: 16 units
    a. 12 units in a major instrumental ensemble, including
        i. 3 units in wind ensemble, and
        ii. 3 units in symphony orchestra (A minimum of 3 units in wind ensemble or symphony orchestra must be completed after the student has passed the qualifying examination for the major.)
    b. 4 units of percussion ensemble (one term each year for four years)

***Senior Experience* in Music Performance**

The required senior recital is considered the standard *Senior Experience* for students in the performance major. Students have the option of proposing enhancements to the senior recital or alternative performance projects as their *Senior Experience* with the approval of the applied teacher, advisor, and department chair. Alternative *Senior Experience* projects do not replace the senior recital requirement.

CONSERVATORY OF MUSIC

Emphasis options for performance majors

Emphasis in collaborative piano
In addition to all requirements for the major in piano performance, the following are required:

1. Supporting courses for the emphasis: 6 units
    a. MURP 420: *Piano Accompaniment: Vocal* (3 units)
    b. MURP 425: *Piano Accompaniment: Instrumental* (3 units)
    c. MURP 271, 272, 273, 274, 275, 276: *Vocal diction and techniques series*
2. Recitals: in addition to required solo degree recitals, the following:
    a. accompany 1 full or 2 half vocal recitals
    b. accompany 1 full or 2 half instrumental recitals
3. General Education: completion of the degree requirements must include 12 units each of two of the following (or placement at the intermediate level): French, German, or Italian, taken for a grade

Emphasis in piano pedagogy
In addition to all requirements for the major in piano performance, the following are required:

1. Supporting courses for the emphasis: 15 units
    a. MUEP 303: *Piano Pedagogy III* (3 units)
    b. Two of MUEP 502: *Early Advanced Piano Pedagogy*, MUEP 503: *Group Piano Pedagogy*, MUEP 505: *Internship in Piano Pedagogy* (6 units)
    c. MUEP 581, 582: *Student Teaching in Piano I, II* (6 units)
2. General Education: completion of the requirement must include:
    a. PSYC 260 or PSYC 340

Emphasis in jazz and improvisational music
Admission to the Bachelor of Music performance major with an emphasis in jazz and improvisational music may be granted to a limited number of students upon completion of qualifying examinations and with the approval of a candidate selection committee.
For detailed information on admission and scheduling of requirements, students are referred to the chair of the jazz and improvisational music department.
Specific courses required for the emphasis are as follows:

1. Performance: 54 units
    a. 36 units of applied individual instruction (MUIN) in piano, strings, winds, or percussion numbered 301-320 during the freshman and sophomore years (before admission to the jazz emphasis)
    b. 18 units of MUIN 329 after admission to the jazz emphasis (candidates may elect more than 18 units)
    c. Presentation of a half recital during junior year and a full recital during senior year

    Note: Before admission to the jazz emphasis, Bachelor of Music performance candidates are required to study with the respective classical applied instructors but may elect added applied study with the respective jazz applied instructor. After admission to the jazz emphasis, candidates are required to study with the respective jazz applied instructors but may elect to continue with the respective classical instructor.

2. Supporting courses for the emphasis:
    a. MUTH 240: *Jazz Theory and Aural Training* (3 units)
    b. MUCA 220, 221: *Jazz Improvisation I, II* (6 units)
    c. MUCA 331, 332, 333: *Jazz Composition and Arranging I, II, III* (9 units)
    d. MURP 320: *Functional Jazz Piano* (3 units)
    e. MUHI 455: *Jazz History* (6 units)
    f. MUEP 305: *Jazz Pedagogy (1 unit)*
    g. MUEP 120: *Basic Audio Recording (1 unit)*
3. Piano majors must complete either MURP 451 and 452: *Literature of the Piano I and II* or MUEP 301 and 302: *Piano Pedagogy I and II*
4. Ensemble: completion of the requirement must include:
    a. 5 terms of MUEN 248: *Jazz Small Group Studies* after admission to the jazz emphasis (5 units)
    b. 6 terms of MUEN 295: *Jazz Ensemble* or MUEN 293: *Jazz Band*, after admission to the jazz emphasis (6 units)
    c. Additional ensembles, specific to primary instrument, as follows:
        - Winds/Percussion: 6 terms wind ensemble/symphonic band; 3 terms chamber music
        - Strings: 9 terms symphony orchestra (3 terms required participation after admission to the emphasis in jazz studies); 3 terms chamber music
        - Piano: 3 terms symphony orchestra, wind ensemble, symphonic band, concert choir, women's choir, or chorale; 3 terms supervised accompanying
        - Guitar: 3 terms symphony orchestra, wind ensemble, symphonic band, concert choir, women's choir, chorale, or chamber music
5. Required Projects
    a. DownBeat Magazine Student Music Awards Application: By December 31 of the senior year, all candidates are required to submit an application and compact-disc recording (a minimum of 10 minutes or 3 selections) for the Jazz Soloist category in the annual DownBeat Magazine Student Music Awards. Repertoire will be chosen by the coordinator of jazz performance practice in consultation with the applied jazz studio teacher.
    b. Assembly of Self-Promotional CD and/or Web site: Over the course of the candidate's two years in the jazz emphasis, a media project documenting the student's jazz performances, compositions, arrangements, and teaching/pedagogical demonstrations must be assembled. Candidates may choose to create an audio CD, audio/visual DVD, or personal Web site containing a minimum of 30 minutes of recorded work by the candidate. The selected project(s) must be presented to the jazz and improvisational music faculty before the conclusion of the final term of study.
    c. Jazz Small Group Coaching: All candidates will direct or co-direct a jazz small group for a minimum of one term after admission to the emphasis in jazz studies (one 60-minute rehearsal per week). Each candidate must submit (in writing to the jazz faculty) a repertoire list and rehearsal plan for the term by the end of the third week. Each candidate must arrange for one group rehearsal observation by a jazz faculty member before the mid-term reading period.
    d. Jazz Big Band Conducting: All candidates will conduct designated rehearsals and sectionals of Jazz Band or Jazz Workshop after admission to the emphasis in jazz studies.

e. Jazz “Tune of the Week” Tutoring: All admitted Jazz Emphasis candidates will serve as co-tutors for jazz “Tune of the Week” study/rehearsal sessions once each term. Tutors will organize and lead a single session (2-3 hours in duration, time and date TBA) at the end of each term for freshmen and sophomores contemplating admission to the Jazz Emphasis. Each session will serve as an “organized jam session” covering the 10 “Tune of the Week” selections assigned in each given term.

***Senior Experience* in Music - Jazz Emphasis**

The senior recital and media project (assembly of a self-promotional CD and/or personal Web site) are designated as the official *Senior Experiences* for Jazz Emphasis candidates in both Performance and Composition & Arranging. Students have the option of proposing enhancements to this Senior Experience with the approval of the applied teacher, advisor, and department chair.

Over the course of the candidate’s two years in the jazz emphasis, a media project documenting the student’s jazz performances, compositions, arrangements, and teaching/pedagogical demonstrations will be assembled. Candidates may choose to create an audio CD, audio/visual DVD, or personal website containing a minimum of 30 minutes of recorded work by the candidate. The selected project(s) must be presented to the jazz and improvisational music faculty before the conclusion of the final term of study.

CONSERVATORY OF MUSIC

The major in music education

2010-2011 Course Catalog

Common requirements for the major in music education
In addition to degree requirements degree requirements and those of specific areas below, the following are required of all music education majors:

1. Education: 21 units
    a. EDST 180: *Psychology of Learning* (6 units)
    b. EDST 340: *Sociology of Education* (6 units)
    c. EDST 350: *Ethnicity, Cultural Diversity, and Education* (6 units)
    d. EDUC 431: *Educating All Learners - Music* (3 units)
2. Music education: 9 units
    a. MUEP 201: *Introduction to Music Education* (3 units)
    b. MUEP 380: *Conducting Principles* (6 units)
3. Student teaching: 21 units
    a. MUEP 660: *Advanced Methods in Teaching Music* (3 units)
    b. MUEP 680: *Student Teaching* (18 units)
4. Performance: 36 units
    a. Minimum of 36 units in applied individual instruction, required every term in which the student is in residence on the Appleton campus with the exception of the student-teaching semester
    b. Presentation of a half recital during the junior or senior year
5. Non-music courses
   Must include the following:
    a. 6 units of biological science or ANTH 140 and 6 units of physical science; or 6 units of BIOL 100, 110, 230 or GEOL 150
    b. 6 units in mathematics
    c. A total of 60 units in courses other than music
6. Participation in a major ensemble is required every term in residence on the Appleton campus, as specified in the following requirements for each track: general, choral/general, instrumental, instrumental/general, and choral/general/ instrumental.
7. Completion of major requirements for one of the five areas as outlined below.

***Senior Experience* in Music Education**
Student Teaching is the culminating experience for students in music education. This experience places Lawrence seniors in schools for a period of 18 weeks. During this time, student teachers work closely with a mentor teacher at the secondary and/or elementary level to gain the professional knowledge and skills that will prepare them for state certification licensure in Wisconsin. A variety of projects, tasks, and events comprise the student teaching *Senior Experience* at Lawrence. As they work with their mentor teacher, students observe classroom teaching as they prepare to take responsibility for planning and executing classes, rehearsals, and lessons under the expert guidance of master teachers.

In addition to working with a mentor teacher in the schools, students also work with Lawrence faculty during student teaching, both as mentors and in a weekly seminar meeting. Seminar topics include examination of practical issues related to the classroom, (such as classroom management, lesson planning and execution, and working with young learners), broad matters

related to functioning professionally in schools and the profession (licensure, administration, and community), and philosophical issues. One of the mechanisms for facilitating discourse in the seminar is the videotape that student teachers bring in to the seminar. These brief episodes facilitate group discussion of their concerns, questions, and wonderments while providing a glimpse into their distinct student teaching environment.

During student teaching, students engage the complete range of their Lawrence studies, including but not limited to the musical, pedagogical and technical coursework in the program. One of the culminating products of the student teaching experience is the creation of an electronic portfolio that includes lesson plans, philosophical statement, résumé, assessments, audio and video examples of their teaching, demonstrating the range and scope of the student's experiences and documenting that the student has met Lawrence's teacher education standards.

General music

In addition to degree requirements and common requirements for all music education majors (above), the following are required for the general music emphasis:

1. Music education and pedagogy: 28-30 units
    a. MUEP 371 and 372: *Vocal Pedagogy I, II* (4 units) or MUEP 231 and 232: *Vocal Proficiency and Pedagogy I, II* (2 units). (Students whose principal performance instrument is other than voice must complete MUEP 231 and 232.)
    b. MUEP 240, 350, 370: *General Music Methods and Practicum* (15 units)
    c. MUEP 335: *Guitar Techniques for the Music Educator* (1 unit)
    d. MUEP 340: *Musical Theatre Application for the Music Educator* (3 units)
    e. MUEP 402: *Choral Techniques, Rehearsal Procedures, and Repertoire for Elementary and Middle-Level Choirs* (6 units)
    f. MUEP 307: *Orchestration for the Music Educator* (1 unit)
2. Keyboard skills: MURP 211 and 212: *Keyboard Skills for Music Educators I, II* (2 units) in addition to degree requirement in keyboard skills
3. MURP 271, 272, 273, 274, 275 for students whose primary instrument is voice
4. Ensemble: 12 units
    Participation in major ensemble required every term in residence on the Appleton campus.
    The requirement is based on the student's principal instrument, as follows:
    a. Voice and keyboard:
        i. 9 units in a major choral ensemble, and
        ii. 3 units in any major ensemble
    b. Winds and percussion:
        i. 6 units in wind ensemble or symphonic band,
        ii. 3 units in any major choral ensemble, and
        iii. 3 units in any major ensemble.
    c. Strings:
        i. 6 units in symphony orchestra,
        ii. 3 units in any major chorale ensemble, and
        iii. 3 units in any major ensemble

CONSERVATORY OF MUSIC

Note: To earn a B.Mus. degree with this major requires completion of more than the 216 units required for the degree. Many students in this major opt to complete the student-teaching requirement during a 13th term.

Choral/general
In addition to degree requirements and common requirements for all music education majors (top), the following are required for the choral/general emphasis:

1. Music education and pedagogy: 34-36 units
    a. MUEP 371 and 372: *Vocal Pedagogy I, II* (4 units) or MUEP 231 and 232: *Vocal Proficiency and Pedagogy I, II* (2 units).
    (Students whose principal performance instrument is other than voice must complete MUEP 231 and 232.)
    b. MUEP 240, 350, 370: *General Music Methods and Practicum* (15 units)
    c. MUEP 307: *Orchestration for the Music Educator* (1 unit)
    d. MUEP 335: *Guitar Techniques for the Music Educator* (1 unit)
    e. MUEP 340: *Musical Theatre Application for the Music Educator* (3 units)
    f. MUEP 402: *Choral Techniques, Rehearsal Procedures, and Repertoire for Elementary and Middle-Level Choirs* (6 units)
    g. MUEP 442: *Choral Techniques, Rehearsal Procedures, and Repertoire for the High School Choir* (3 units)
    h. MUEP 462: *Choral Practicum* (3 units)
2. Keyboard skills: MURP 211 and 212: *Keyboard Skills for Music Educators I, II* (2 units) in addition to degree requirement in keyboard skills
3. Performance: 5-6 units
    a. MURP 271, 272, 273, 274, 275 for students whose primary instrument is voice
    b. A minimum of 2 terms of MUIN 303 for students whose primary instrument is other than voice and satisfactory completion of the vocal proficiency examination
4. Ensemble: 12 units in a major choral ensemble
    Participation in major ensemble required every term in residence on the Appleton campus.

Note: To earn a B.Mus. degree with this major requires completion of more than the 216 units required for the degree. Many students in this major opt to complete the student-teaching requirement during a 13th term.

Instrumental
In addition to degree requirements and common requirements for all music education majors (top), the following are required for the instrumental emphasis:

1. Music education and pedagogy: 34 units
    a. MUEP 230: *Voice for Instrumental Music Educators* (1 units)
    b. MUEP 305: *Jazz Pedagogy* (1 unit) or MUEP 308: *String Pedagogy for Music Educators* (1 unit)
    c. MUEP 401: *Instrumental Methods and Rehearsal Techniques I* (6 units)
    d. MUEP 451: *Instrumental Methods and Rehearsal Techniques II* (6 units)
    e. MUEP 307: *Orchestration for the Music Educator* (1 unit)
    f. MUEP 310: *Brass Techniques* (3 units)
    g. MUEP 315: *Percussion Techniques* (3 units)

   h. MUEP 321, 322: *Woodwind Techniques I, II* (6 units)
   i. MUEP 331, 332: *String Techniques I, II* (6 units)
2. Ensemble: 12 units
   a. Winds and percussion:
      i. 9 units in wind ensemble or symphonic band, and
      ii. an additional 3 units in any major ensemble
   b. Strings:
      i. 9 units in symphony orchestra, and
      ii. 3 additional units in any major ensemble

Note: To earn a B.Mus. degree with this major requires completion of more than the 216 units required for the degree. Many students in this major opt to complete the student-teaching requirement during a 13th term.

Instrumental/general
In addition to degree requirements and common requirements for all music education majors (top), the following are required for the instrumental/general emphasis:

1. Music education and pedagogy: 50 units
   a. MUEP 305: *Jazz Pedagogy* (1 unit) or MUEP 308: *String Pedagogy for Music Educators* (1 unit)
   b. MUEP 231, 232: *Vocal Proficiency and Pedagogy I, II* (2 units)
   c. MUEP 240, 350, 370: *General Music Methods and Practicum* (15 units)
   d. MUEP 335: *Guitar Techniques for the Music Educator* (1 unit)
   e. MUEP 401: *Instrumental Methods and Rehearsal Techniques I* (6 units)
   f. MUEP 451: *Instrumental Methods and Rehearsal Techniques II* (6 units)
   g. MUEP 307: *Orchestration for the Music Educator* (1 unit)
   h. MUEP 310: *Brass Techniques* (3 units)
   i. MUEP 315: *Percussion Techniques* (3 units)
   j. MUEP 321, 322: *Woodwind Techniques* (6 units)
   k. MUEP 331, 332: *String Techniques* (6 units)
2. Keyboard skills:
   a. MURP 211 and 212: *Keyboard Skills for Music Educators I, II* (2 units) in addition to degree requirements in keyboard skills.
3. Ensemble: 12 units
   Participation in major ensemble required every term in residence on the Appleton campus. The requirement is based on the student's primary instrument, as follows:
   a. Winds and percussion:
      i. 6 units in wind ensemble or symphonic band,
      ii. 3 units in any major chorale ensemble, and
      iii. 3 additional units in any major ensemble
   b. Strings:
      i. 6 units in symphony orchestra,
      ii. 3 units in any major chorale ensemble, and
      iii. 3 units in any major ensemble

Note: To earn a B.Mus. degree with this major requires completion of more than the 216 units required for the degree. Many students in this major opt to complete the student-teaching requirement during a 14th term.

CONSERVATORY OF MUSIC

The major in theory/composition

2010-2011 Course Catalog

Students pursuing the theory/composition major must submit an acceptable portfolio consisting of a minimum of two compositions (in legible manuscript and accompanied by a recording if possible), normally by the end of the sophomore year.

Theory/composition

1. Music theory in addition to the core courses required for the B.Mus. degree: 36 units
    a. MUTH 401, 402: *Counterpoint I, II* (12 units)
    b. MUTH 411, 412: *Orchestration I, II* (12 units)
    c. MUTH 510: *Analysis of 20th Century Music* (6 units)
    d. MUTH 350/550: *Topics in Music Analysis* (6 units)
2. Music composition and arranging: 30 units
    a. 6 units: MUCA 250: *Introductory Composition* (3 units per term)
    b. 6 units: MUCA 350: *Intermediate Composition* (3 units per term)
    c. 6 units: MUCA 550: *Advanced Composition* (3 units per term)
    d. 6 additional units from MUCA 250, 350, 550
    e. MUCA 300: *Techniques of the Contemporary Composer* (6 units)
    f. Presentation of a full composition recital during senior year
3. Music history: fulfillment of the degree requirement of 24 units must include 12 units in courses numbered 400 or above
4. Performance: 24 units
   A minimum of 24 units in applied individual instruction
5. Ensemble: 12 units
    a. 3 units in major ensemble,
    b. 3 units in chamber music, and
    c. 6 units in major ensemble or chamber music

***Senior Experience* in Music Theory/Composition**
For students majoring in Music Theory/Composition, the *Senior Experience* consists of a recital of original compositions and a portfolio of scores and recordings of works composed while at Lawrence. The composition recital, which is normally held during the winter or spring term of the senior year, must include approximately 35-40 minutes of original music composed while at Lawrence (e.g., 5 to 6 works for various chamber ensembles, possibly including a solo work or two), showing variety in musical style, compositional technique, and artistic conception. The compositions should represent the student's finest work at Lawrence, and they should be prepared, rehearsed, and performed at the highest possible level.

The student, in consultation with his or her principal composition instructor, is responsible for all aspects of production (assembling personnel, preparation of scores and parts, preparation of the concert program and program notes, organizing rehearsals, and, where appropriate, coaching). The senior portfolio consists of professional-quality scores prepared by the student along with recordings of works performed at Lawrence, and must be submitted by the end of the tenth week of the term in which the senior recital occurs.

The senior recital and portfolio is not normally subject to consideration for honors in independent study. Students wishing to undertake an honors project distinct from the senior recital may do so, but the honors project may not substitute for the senior recital and portfolio.

Emphasis option for theory/composition majors

Emphasis in jazz and improvisational music
Admission to the Bachelor of Music in theory/ composition with an emphasis in jazz and improvisational music may be granted to a limited number of students upon successful completion of qualifying examinations and with the approval of a candidate selection committee.

For detailed information on admission and scheduling of requirements, students are referred to the chair of the jazz and improvisational music department.
Specific courses required for the emphasis are as follows:

1. Music theory in addition to the core courses required for the B.Mus. degree:
    a. MUTH 411:*Orchestration I* (6 units)
    b. MUTH 510:*Analysis of 20th Century Music* (6 units)
2. Music composition and arranging
    a. MUCA 331, 332, 333:*Jazz Composition and Arranging I, II, III* (9 units)
    b. MUCA 530:*Advanced Jazz Composition* (9 units at 3 units per term)
    c. MUCA 300:*Techniques of the Contemporary Composer* (6 units)
    d. 6 units from MUCA 250, 350, 550:*Composition*
3. Supporting courses for the emphasis:
    a. MUTH 240:*Jazz Theory and Aural Training* (3 units)
    b. MUCA 220, 221:*Jazz Improvisation I, II* (6 units)
    c. MURP 320:*Functional Jazz Piano* (3 units)
    d. MUHI 455:*Jazz History* (3 units)
    e. MUEP 305:*Jazz Pedagogy* (1 unit)
    f. MUEP 120:*Basic Audio Recording* (1 unit)
4. Performance: A minimum of 24 units in applied individual instruction and 6 terms on the major instrument or voice
5. Ensemble: Completion of the requirement must include:
    a. 3 terms of MUEN 248: *Jazz Small Group Studies*, after admission to jazz emphasis (3 units)
    b. 3 terms of MUEN 295: *Jazz Ensemble or MUEN 293*: Jazz Band, after admission to the jazz emphasis (3 units)
    c. Additional ensembles, specific to primary instrument, as follows:
    Winds/Percussion: 6 terms wind ensemble/ symphonic band; 3 terms chamber music
    Strings: 9 terms symphony orchestra (3 terms required participation after admission to the emphasis in jazz studies); 3 terms chamber music
    Piano: 3 terms symphony orchestra, wind ensemble, symphonic band, concert choir, women's choir, or chorale; 3 terms supervised accompanying
    Guitar: 3 terms symphony orchestra, wind ensemble, symphonic band, concert choir, women's choir, chorale, or chamber music
    Voice: 6 terms concert choir or women's choir

6. Required Projects
    a. Recitals: Half recital (30 minutes maximum stage time) during junior year, full recital (60 minutes maximum stage time) during senior year.
    b. *DownBeat* Magazine Student Music Awards Application: By December 31 of the senior year, all candidates are required to submit an application and CD recording (a minimum of 10 minutes or 3 selections) for the Jazz Soloist category in the annual DownBeat Magazine Student Music Awards. Repertoire will be chosen by the coordinator of jazz performance practice in consultation with the applied jazz studio teacher
    c. Assembly of Self-Promotional CD and/or Web site: Over the course of the candidate's two years in the jazz emphasis, a media project documenting the student's jazz performances, compositions, arrangements, and teaching/pedagogical demonstrations must be assembled. Candidates may choose to create an audio CD, audio/visual DVD, or personal Web site containing a minimum of 30 minutes of recorded work by the candidate. The selected project(s) must be presented to the jazz and improvisational music faculty before the conclusion of the final term of study.
    d. Jazz Small Group Coaching: All candidates will direct or co-direct a jazz small group for a minimum of one term after admission to the emphasis in jazz studies (one 60-minute rehearsal per week). Each candidate must submit (in writing to the jazz faculty) a repertoire list and rehearsal plan for the term by the end of the third week. Each candidate must arrange for one group rehearsal observation by a jazz faculty member before the mid-term reading period.
    e. Jazz Big Band Conducting: All candidates will conduct designated rehearsals and sectionals of Jazz Band or Jazz Workshop after admission to the emphasis in jazz studies.
    f. Jazz "Tune of the Week" Tutoring: All admitted Jazz Emphasis candidates will serve as co-tutors for jazz "Tune of the Week" study/rehearsal sessions once each term. Tutors will organize and lead a single session (2-3 hours in duration, time and date TBA) at the end of each term for freshmen and sophomores contemplating admission to the Jazz Emphasis. Each session will serve as an "organized jam session"
    covering the 10 "Tune of the Week" selections assigned in each given term.

Note: Before admission to the jazz emphasis, Bachelor of Music theory/composition candidates are required to study with the respective classical applied instructors but may elect added applied study with the respective jazz applied instructor. After admission to the jazz emphasis, candidates are required to study with the respective jazz applied instructors but may elect to continue applied study with the respective classical instructor.

CONSERVATORY OF MUSIC

Bachelor of Arts/Bachelor of Music Double-Degree Program
Professional study in music and study in the liberal arts may be combined in a five-year program leading to both Bachelor of Music and Bachelor of Arts degrees, the latter with a major other than music. Both degrees are awarded at the conclusion of the five-year program. Interested students should discuss this possibility with their advisors as early as possible.

Approximately half of the curriculum is devoted to the study of music — completion of the music core and requirements for a major in performance, music education, or theory/composition. The other half of the curriculum mirrors that of the Bachelor of Arts program, emphasizing breadth of study central to a liberal arts education, focused study in the college major and elective study to complement other work or explore other fields of interest.

Certain majors in the Bachelor of Arts degree program (for example, some laboratory sciences) may be difficult to combine with the Bachelor of Music degree program into a five-year double-degree program, especially if the student's objective is to maintain serious options for graduate or professional work in both areas after graduation. Such combinations may require that course overloads be taken to complete minimum requirements in each major in a timely and satisfactory manner. Early and regular consultation with advisors in both the college and the conservatory is imperative. Further, students who seek certification for purposes of teaching a subject other than music are urged to see the associate dean of the conservatory.

In addition to academic policies and regulations, students in the conservatory are subject to policies and procedures detailed in conservatory department guidelines and the Conservatory Student Handbook.

Requirements for the five-year Bachelor of Arts/Bachelor of Music Degrees

1. Completion of a minimum of 15 terms of study and 270 units. Of the 270 units required, a student must present
   g. a minimum of 144 units in music, exclusive of MURP 201, 202, 203, 301, 302 and MUTH 161, 162, 171, 172
   h. a minimum of 114 units selected from courses other than music
   i. no more than 42 units from courses in education
   j. a minimum of 72 units from courses numbered 200 and above
   k. no more than 90 units from a single department outside of music, except that in the art department a student may present no more than 126 units, no more than 90 of which may be in art and no more than 90 of which may be in art history
   l. no more than 12 units from academic internships
2. In the freshman year, 12 units of Freshman Studies.
3. Completion of the General Education Requirements:
   a. Distribution, in order to gain exposure to a range of disciplines, subjects and perspectives within the liberal arts:
      i. 6 units selected from departments and courses listed within the Division of Humanities. All courses in the humanities taught in English will count toward this requirement. Humanities courses taught in a foreign language and numbered 300 and above also will count toward this requirement, except as noted in the course catalog.
      ii. 6 units selected from departments and courses listed within the Division of Fine Arts;
      iii. 6 units selected from departments and courses listed within the Division of Social Sciences;

iv. 6 units selected from laboratory courses in biology, chemistry, geology, or physics in the Division of Natural Sciences

b. Diversity, in order to prepare students for a more global world and a more diverse America:
   i. 6 units selected from courses designated as either emphasizing global and comparative perspectives on the world or focusing on areas outside Europe and the United States;
   ii. 6 units selected from courses designated as focusing on dimensions of diversity, such as race, ethnicity and gender, that are of particular importance in understanding contemporary society in the United States.

c. Competency, in order to improve and reinforce those fundamental abilities central to a liberal arts education:
   i. 6 units selected from courses designated as writing intensive or 6 units selected from courses designated as speaking intensive;
   ii. 6 units selected from courses designated as emphasizing mathematical reasoning or quantitative analysis;
   iii. 6 units in a foreign language taken from courses numbered 200 or above and taught primarily in a language other than English. This requirement may also be satisfied by attaining a score of 4 or 5 on an Advanced Placement examination in a foreign language or by passing a proficiency examination administered by a Lawrence University foreign language department.

Stipulations pertaining to the General Education Requirements for the five-year Bachelor of Arts/Bachelor of Music Degrees
Qualified courses may count toward the requirements in any two of the categories above (distribution, diversity and competency). Some courses may meet two requirements within a category. No single course can be used to fulfill more than two requirements. Credits granted pursuant to university policy for examinations (Lawrence Advanced Placement (AP), International Baccalaureate (IB), or A-levels) may be used as appropriate to fulfill diversity or competency requirements only.

4. Completion of a college major — departmental, interdisciplinary, or student-designed — exclusive of music, including all course and non-course requirements, such as departmental examinations, research projects and presentations, portfolios, etc. Students are required to declare a major by the beginning of the junior year.
5. Completion of music core requirements:
   a. Music Theory
      i. MUTH 151, 161, 171 or MUTH 201, 211, 221
      ii. MUTH 152, 162, 172 or MUTH 202, 212, 222
      iii. MUTH 251, 261 and 271
      iv. MUTH 252, 262 and 272
      v. MUTH 301, 311 and 321
   b. Music History
      i. MUHI 201 and 202
      ii. 12 units selected from courses in music history numbered 400 or above
   c. Keyboard skills: MURP 201, 202, 203 or MURP 301, 302
   d. Applied music individual instruction as specified under requirements for the major and areas of emphasis

   e. Ensemble study: a minimum of 12 units. Students are required to participate in an ensemble every term in which they are attending classes on the Appleton campus. Requirements for specific types of ensemble study (MUEN) are specified under requirements for majors and areas of emphasis.
6. Completion of a major in music — performance, music education, theory/composition, or student-designed — including all course and non-course requirements, such as recitals, qualifying examinations, etc. A student is expected to pass a qualifying examination for admission to the major after no more than six terms of study.
7. Completion of a designated Senior Experience course or activity within the chosen majors for each degree.
8. An academic record that meets the following standards:
   a. A 2.000 grade-point average in all Lawrence courses.
   b. A 2.000 grade-point average in the music major (all music courses and non-music courses required for the major) unless otherwise specified under the major requirements.
9. Completion of required terms and units in residence as specified by the university residence requirements

CONSERVATORY OF MUSIC

Courses

Music Composition & Arranging

MUCA 100
Fundamentals of Composition
An introduction to the craft of music composition open to students with some background in music. Taught as a small class, the course will introduce basic compositional techniques to students with limited background in composition. Individualized compositional projects will be complemented by group listening and analysis. Does not satisfy any requirement for the theory/composition major. Units: 3.

MUCA 110
Introduction to Electronic Music
Through hands-on composition-based projects, the course explores electronic and computer music in the context of the contemporary art music tradition as well as various popular idioms. Topics include digital audio sampling and editing, digital signal processing, sound synthesis, MIDI sequencing, and multi-track sound mixing. Discussions engage the integral role of technology in shaping our musical culture as well as the history of electronic music. Units: 6.

MUCA 200
Exploration in Composition
An intermediate-level composition class intended for music majors not pursuing the theory/composition degree. Units: 3.

MUCA 220
Jazz Improvisation I
An introduction to the fundamentals of jazz improvisation. Exploration of jazz repertoire through scale/chord/mode associations, rhythmic and linear development, and solo transcription/analysis. Units: 3.

Prerequisite: MUTH 240

MUCA 221
Jazz Improvisation II
Continued exploration of jazz repertoire using more complex forms and progressions, intermediate linear concepts, and solo transcription/analysis. Units: 3.

Prerequisite: MUCA 220

MUCA 250
Introductory Composition
Composition of small forms in various media such as trios and quartets for strings, brass, or winds; art songs; and piano music. Theory/composition majors must complete a minimum of two terms. May be repeated for credit. Units: 3.

Prerequisite: MUCA 100 and MUTH 251

MUCA 300
Techniques of the Contemporary Composer
Development of the craft of the contemporary composer through selected topics in pitch, rhythm, and form. The course comprises analysis of major compositional techniques of contemporary music in tandem with directed assignments in composition. Units: 6.

Prerequisite: Two terms of MUCA 250 or consent of instructor

MUCA 331
Jazz Composition and Arranging I
Essentials of composing jazz music and writing for the jazz small group. Fundamentals of notation, orchestration, rhythmic embellishment, melodic development, jazz harmony, vertical sonorities, basic forms, 2-5 part densities. Units: 3.

Prerequisite: MUTH 240

MUCA 332
Jazz Composition and Arranging II
Intermediate composition and arranging concepts for expanded jazz ensembles. Units: 3.

Prerequisite: MUCA 331 or consent of instructor

MUCA 333
Jazz Composition and Arranging III
Advanced jazz writing projects. Units: 3.

Prerequisite: MUCA 332

MUCA 350
Intermediate Composition
A continuation of MUCA 250, with emphasis on larger forms. Theory/composition majors must complete a minimum of two terms. May be repeated for credit. Units: 3.

Prerequisite: MUTH 301 and at least two terms of MUCA 250

MUCA 400
Topics in Music Composition
Selected topics in contemporary music, intended for theory/composition majors and other students interested in music composition. Units: Variable.

Prerequisite: MUTH 301

MUCA 530
Advanced Jazz Writing Skills
A continuation of MUCA 331, 332, 333 through private instruction. May be repeated for credit. Units: 3.

Prerequisite: MUCA 333 and admission to an emphasis in jazz studies, or consent of instructor

MUCA 550
Advanced Composition
Composition in various forms and for various media, culminating in at least one work for large ensemble. Theory/composition majors must complete a minimum of two terms. May be repeated for credit. Units: 3.

Prerequisite: Two terms minimum of MUCA 350

MUCA 390, 590, 690
Tutorial Studies in Music Composition and Arranging
Units: Variable.

Prerequisite: Counter Registration Required.

MUCA 191, 391, 591, 691
Directed Study in Composition and Arranging
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

MUCA 195, 395, 595, 695
Internship in Music Composition and Arranging
An experience-based project in music developed in consultation with a designated supervisor and a conservatory faculty member, comprising a work component and an academic component. The academic component of the internship, carried out under the supervision of the faculty member, may include readings related to the substance of the internship, discussions with the faculty member, and a written report or other culminating project appropriate to the discipline. Units: Variable.

Prerequisite: Counter Registration Required.

MUCA 599, 699
Independent Study in Music Composition and Arranging
Students considering an honors project should register for independent study for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

CONSERVATORY OF MUSIC

Courses

Music Ensemble Performance

MUEN 212
Hybrid Vocal Ensemble
This ensemble, comprised of 8-16 SATB singers, will explore a wide variety of vocal works from all eras and genres of music and assist in building skills in various styles of improvisation while exploring and experiencing the deep connections between disparate musical genres. Particular emphasis will be placed on vocal jazz, early music, world music and newly composed works. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term.

MUEN 215
Vocal Jazz Ensemble
Study and performance of music for vocal ensemble in the jazz idiom. Membership determined by audition. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 230
Percussion Ensemble
Open to all students by audition. Performance of contemporary percussion chamber music, including music written specifically for mallet ensembles. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 235
Improvisation Group
Solo and group improvisation without stylistic boundaries. Membership determined by audition. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 240
Collegium Musicum
An ensemble of instrumentalists and singers devoted to the study and performance of Medieval, Renaissance, and Baroque music. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 245
Chamber Music
A study of ensemble playing through repertoire selected according to the interests and capability of the students. A maximum of 6 units, beyond departmental requirements, may apply to degree requirements. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 248
Jazz Small Group Studies
Year-long study and performance of jazz small group repertoire for ensembles chosen by audition. A maximum of 6 units of jazz small group (chamber) music, beyond departmental requirements, may apply to degree requirements. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 250
Supervised Accompanying
Supervised accompanying in a voice or instrumental studio. To include attendance at lessons as determined by the supervising teacher and at least two hours of rehearsal weekly. Repertoire must be approved by both the pianist's applied teacher and the other studio teacher involved. May be repeated for credit. Units: 1.

Prerequisite: Consent of instructor and students applied teacher. Supervised Accompanying Permission Form is required to register. Counter Registration Required.

MUEN 270
Viking Chorale
Introductory choral experience open to all students of the university. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 272
Cantala Women's Choir
An advanced women's ensemble that studies and performs music of all historical periods. Open to all women of the university by audition. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 275
Lawrence Concert Choir
An advanced choral ensemble that studies and performs music of all historical periods. Open to all students of the university by audition. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 280
Performance Skills for Singers
Introduction to the craft of the singing actor. Stage/audition protocol; expressive movement; gesture; character analysis; subtext; blocking. Students must prepare song for analysis and performance. May not be repeated. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term.

MUEN 281
Opera Workshop
Preparation for the singing actor. Theatre games; improvisation; character research and analysis; elements of style. Culminates in “showcase” presentation. May be repeated for credit. Units: 1.

Prerequisite: MUEN 280 Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 282
Mainstage Opera Preparation
Experience in musical and dramatic aspects of performance, especially preparation of character, language, and music from the selected production. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term **CONSERVATORY OF MUSIC**

MUEN 283
Mainstage Opera Performance
Final preparation and performance of an operatic or music theatre production. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 284
Opera Scenes
Performance practice for the singing actor. Role preparation including musical/linguistic coaching; character analysis; blocking; staged performance. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 285
Wind Ensemble
A select group chosen by audition. Emphasis on wind repertoire with one player per part. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of eac term

MUEN 286
Wind Ensemble/Symphonic Band – Percussion
Membership determined by audition. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 287
Symphonic Band
Study and performance of music written for concert or symphonic band. Membership determined by audition. *Note:* Although students may participate in both Wind Ensemble and Symphonic Band and receive credit for both, only 1 unit of this participation per term may apply toward satisfying degree requirements. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 290
Symphony Orchestra
Membership determined by audition. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 293
Jazz Band
Membership determined by audition. May be repeated for credit. Units: 1.

Prerequisite: Students may not registrar for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 295
Jazz Ensemble
Membership determined by audition. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 297
Jazz Workshop
Membership determined by audition. May be repeated for credit. Units: 1.

Prerequisite: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term.

MUEN 410
Advanced Wind Quintet Studies
Year-long study and performance of advanced wind quintet repertoire for an ensemble chosen by audition. A maximum of 6 units of chamber music, beyond departmental requirements, may apply to degree requirements. May be repeated for credit. Units: 1.

Prerequisite: Consent of instructor and students applied teacher Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 420
Advanced Brass Quintet Studies
Year-long study and performance of advanced brass quintet repertoire for an ensemble chosen by audition. A maximum of 6 units of chamber music, beyond departmental requirements, may apply to degree requirements. May be repeated for credit. Units: 1.

Prerequisite: Consent of instructor and students applied teacher Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

MUEN 430
Advanced Saxophone Quartet Studies
Year-long study and performance of advanced saxophone quartet repertoire for an ensemble chosen by audition. A maximum of 6 units of chamber music, beyond departmental requirements, may apply to degree requirements. May be repeated for credit. Units: 1.

Prerequisite: Consent of instructor and students applied teacher Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term

CONSERVATORY OF MUSIC

Courses

Music Education and Pedagogy

MUEP 120
Basic Audio Recording
Fundamentals of audio recording, providing a basic knowledge of essential recording theory, skills, and techniques. Units: 1.

MUEP 201
Introduction to Music Education
An introduction to philosophy of music education and the principles of learning theory adn pedagogy, as applied to the private lesson, instrumental and choral ensembles, and general music classroom. Includes directed reading and discussion, observation of experienced teachers, and in-class teaching. Successful completion of this course is required prior to admission to the music education areas of general, choral/general, instrumental, and instrumental/general. Units: 3.

MUEP 230
Voice for Instrumental Music Educators
An introduction to singing technique, voice use, and health. Consists of lectures and private lessons. Units: 1.

Prerequisite: Sophomore standing

MUEP 231
Vocal Proficiency and Pedagogy I, II
An introduction to and practicum on the basics of vocal technique and pedagogy. Emphasis on techniques of breathing, phonation, and vowel formation and the building of resonance and range. Two-term sequence, taken in conjunction with MUEN 270 (students may elect to substitute MUEN 275 or MUEN 272, by audition). 1 unit per term. Units: 1.

Prerequisite: Sophomore standing

MUEP 232
Vocal Proficiency and Pedagogy I, II
An introduction to and practicum on the basics of vocal technique and pedagogy. Emphasis on techniques of breathing, phonation, and vowel formation and the building of resonance and range. Two-term sequence, taken in conjunction with MUEN 270 (students may elect to substitute MUEN 275 or MUEN 272, by audition). 1 unit per term. Units: 1.

MUEP 240
General Music Methods I
Philosophy, principles, and procedures of early childhood music education, grades pre-K-3. Includes basic musicianship skills, understanding and implementation of Kodály, Orff, and Dalcroze methodologies. Laboratory observations and experiences with young children. Units: 6.

Prerequisite: MURP 212 and MUTH 251, or consent of instructor

MUEP 245
Instrumental Pedagogy
An introduction to individualized instrumental instruction. Directed reading and discussion concerning instrumental technique and pedagogy, learning theory, and lesson planning. Includes supervised teaching of private lessons and observation of experienced teachers. May be repeated for credit. Units: 3.

Prerequisite: Sophomore standing and consent of instructor

MUEP 250
High String Pedagogy I
An introduction to violin and viola teaching for elementary-level students. Directed reading and discussion concerning technique and pedagogy, learning theory, and lesson planning. Includes supervised teaching of private lessons and observation of experienced teachers. Units: 3.

MUEP 252
Cello Pedagogy
An introduction to cello teaching. Directed reading and discussion concerning technique and pedagogy, learning theory, and lesson planning. Includes supervised teaching of private lessons and observation of experienced teachers. Units: 3.

MUEP 260
Wind Pedagogy
An introduction to individualized wind instrument instruction. Directed reading and discussion concerning wind instrument technique and pedagogy, learning theory, and lesson planning. Includes supervised teaching of private lessons and observation of experienced teachers. Units: 3.

Prerequisite: Sophomore standing

MUEP 261
Flute Pedagogy
An introduction to teaching the flute. Directed reading and discussion concerning technique and pedagogy, learning theory, and lesson planning. Includes supervised teaching of private lessons and observation of experienced teachers. Units: 3.

Prerequisite: Sophomore standing

MUEP 301
Piano Pedagogy I
An introduction to piano teaching. Study of learning process and teaching methods and materials. Work with lesson and curriculum planning and instructional techniques for both groups and individuals, from average-age beginners through intermediate-level students. Required observation of experienced teachers and supervised teaching. Units: 3.

Prerequisite: Sophomore standing or consent of instructor

MUEP 302
Piano Pedagogy II
An introduction to piano teaching. Study of learning process and teaching methods and materials. Work with lesson and curriculum planning and instructional techniques for both groups and individuals, from average-age beginners through intermediate-level students. Required observation of experienced teachers and supervised teaching. Units: 3.

Prerequisite: MUEP 301

MUEP 303
Piano Pedagogy III
An introduction to piano teaching. Study of learning process and teaching methods and materials. Work with lesson and curriculum planning and instructional techniques for both groups and individuals, from average-age beginners through intermediate-level students. Required observation of experienced teachers and supervised teaching. Units: 3.

Prerequisite: MUEP 302

MUEP 305
Jazz Pedagogy
Structured to prepare teachers of elementary, middle school, and high school students. Jazz education philosophies, teaching improvisation/aural skills/interaction, fostering composition/arranging in the school program, small group development, large ensemble rehearsal techniques, repertoire/ programming, and public presentation. Units: 1.

Prerequisite: Junior standing or consent of instructor

MUEP 307
Orchestration for the Music Educator
An overview of woodwind, brass, string, and percussion instrument families, with discussion of solutions to common problems encountered when dealing with these instruments. Units: 1.

Prerequisite: MUTH 301

MUEP 308
String Pedagogy for Music Educators
A course for students seeking instrumental music teacher certification whose major emphasis is strings. Topics include study of several major string pedagogy concepts, including those of Suzuki, Rolland, and Rabin. Units: 1.

Prerequisite: MUEP 401

MUEP 310
Brass Techniques
An introduction to the teaching of brass instruments, with emphasis on teaching principles and their application to school music. Theoretical and practical playing knowledge of all brass instruments required. Discussion and evaluation of method, materials, and literature. Units: 3.

Prerequisite: Sophomore standing

MUEP 315
Percussion Techniques
An introduction to the teaching of percussion instruments, with emphasis on teaching principles and their application to school music. Theoretical and practical playing knowledge of all percussion instruments required. Required observation, discussion, and evaluation of method, materials, and literature. Units: 3.

Prerequisite: Sophomore standing

MUEP 321
Woodwind Techniques I
A study of the woodwind instruments, with emphasis on teaching principles and their application to school music. Laboratory fee. Units: 3.

Prerequisite: Sophomore standing

MUEP 322
Woodwind Techniques II
A study of the woodwind instruments, with emphasis on teaching principles and their application to school music. Laboratory fee. Units: 3.

Prerequisite: Sophomore standing

MUEP 331
String Techniques I
Class instruction in all bowed string instruments, with emphasis on teaching principles and their application to string classes in elementary and secondary schools. Non-sequential; can be taken in either order. Units: 3.

Prerequisite: Sophomore standing

MUEP 332
String Techniques II
Class instruction in all bowed string instruments, with emphasis on teaching principles and their application to string classes in elementary and secondary schools. Non-sequential; can be taken in either order. Units: 3.

Prerequisite: Sophomore standing

MUEP 335
Guitar Techniques for the Music Educator
Beginning guitar instruction providing practical application of basic performance techniques to the elemtary music classroom for the purposes of teaching. Units: 1.

MUEP 340
Musical Theatre for the Music Educator
This course is designed to equip the future music educator with a basic understanding of the various details and responsibilities involved in mounting a musical theatre production. Topics include: choosing a musical, rehearsal schedules, the audition process, costumes and makeup, stage direction and blocking, lighting and sound, advertising, budget, and problems in the "pit." This course will be offered every other year. Units: 3.

MUEP 350
General Music Methods II
Philosophy, principles, and procedures of elementary music education, grades 4-6. Includes basic musicianship skills, understanding and implementation of Kodály, Orff, and Dalcroze methodologies. Laboratory observations and experiences with young children. Units: 6.

Prerequisite: MUEP 240

MUEP 370
General Music Practicum
A pre-student-teaching opportunity to integrate coursework in general music with practical teaching experience in grades K-12. Two and one-half hours of teaching per week with weekly conferences with instructor. Teaching hours will count toward the 100 clock-hour pre-student teaching mandated by the State of Wisconsin. Units: 3.

Prerequisite: MUEP 232, MUEP 335, and MUEP 350; or consent of instructor

MUEP 371
Vocal Pedagogy I
An introduction to the science and pedagogy of singing, emphasizing the physiology and pedagogy of respiration for singing, the voice source, vocal acoustics, and registration. The application of voice science to pedagogy, issues of pedagogical philosophy and psychology, vocal line, vocal vibrato, and vocal hygiene also are introduced. 3 units awarded upon completion of MUEP 372. Units: 3.

Prerequisite: Junior standing or consent of instructor; credit awarded upon completion of MUEP 372

MUEP 372
Vocal Pedagogy II
A continuation of MUEP 371. Supervised student teaching with weekly lab discussions on issues arising from the teaching experience. Units: 1.

Prerequisite: MUEP 371

MUEP 380
Conducting Principles
An introduction to choral and instrumental conducting: baton and rehearsal techniques, and score-reading (utilizing aural and keyboard skills). Lab required. Units: 6.

Prerequisite: Sophomore standing, MUTH 301 and BKS

CONSERVATORY OF MUSIC

MUEP 401
Instrumental Methods and Rehearsal Techniques I
Principles, procedures, and philosophy for organizing, administering, and teaching in orchestra and band programs at the elementary, middle, and senior high levels. Synthesis and expansion of music and education courses previously taken by music education students. Development of a practical yet comprehensive method for teaching instrumental music. Units: 6.

Prerequisite: Junior standing and MUEP 380

MUEP 402
Choral Techniques, Rehearsal Procedures, and Repertoire I
A study of rehearsal techniques, repertoire, and good singing habits as they relate to choral ensemble and general music programs. Laboratory experience in local junior and senior high schools. Units: 6.

Prerequisite: MUEP 370 or consent of instructor

MUEP 451
Instrumental Methods and Rehearsal Techniques II
A continuation of instrumental conducting studies; rehearsal technique; aural, vocal, and written score analysis; improvisation; and principles of vocal scoring, instrumentation, and orchestration. Specific topics pertinent to the student's emphasis addressed. Required participation in instrumental lab. Units: 6.

Prerequisite: MUEP 401

MUEP 452
Choral Techniques, Rehearsal Procedures and Repertoire II
Students will continue to develop their skills as addressed in MUEP 402. Includes more intensive formal score analysis, lesson planning, vocal modeling, and listening. Students will begin to develop inner hearing, demonstrate an ability to play and sing the score, refine rehearsal efficiency, and demonstrate effective nonverbal skills as well while conducting. Students will also teach in a high school or middle school choral classroom. Units: 6.

Prerequisite: MUEP 402 Corequisite: MUEP 307

MUEP 502
Early Advanced Piano Pedagogy
A course in how to teach the advancing pianist, with a survey of piano literature for the pre-college student. Readings on style, technique, form, and practice techniques. Required observation of conservatory piano faculty. Units: 3.

Prerequisite: MUEP 303

MUEP 503
Group Piano Pedagogy
Study of different types of group teaching situations: in the schools, independent studios, different age and special-interest groups, repertoire classes. Techniques for teaching in the electronic piano laboratory. Units: 3.

Prerequisite: MUEP 303

MUEP 505
Internship in Piano Pedagogy
Internship in independent studio teaching. Opportunity to integrate coursework in piano pedagogy with practical experience in an independent piano studio. Exploration of the business and professional aspects of establishing an independent teaching studio. Studio placement must be approved by instructor. Units: 3.

Prerequisite: MUEP 581

MUEP 581
Student Teaching in Piano I
Supervised teaching in the Lawrence Academy of Music. Includes weekly conferences with the pedagogy instructor. Units: 3.

Prerequisite: MUEP 303

MUEP 582
Student Teaching in Piano II
Supervised teaching in the Lawrence Academy of Music. Includes weekly conferences with the pedagogy instructor. Units: 3.

Prerequisite: MUEP 581

MUEP 660
Advanced Methods in Teaching Music
The seminar will engage students in critical reflection upon their student teaching experience. Concrete and theoretical problems having to do with teaching and learning will be explored (*e.g.,* classroom management, assessment of pupil performance, curriculum design, instructional methods), as will issues having to do with educational policy and school organization. Units: 3.

Prerequisite: Concurrent enrollment in MUEP 680 or consent of the instructor

MUEP 680
Student Teaching
Student teaching assignments for 18-week public or private school semesters are contracted with local Fox Valley schools within a 45 mile radius of campus. Concurrent registration in MUEP 660 Student Teaching Seminar is required. Units: 18.

Prerequisite: Completion of all methods courses and consent of instructor

MUEP 390, 590, 690
Tutorial in Music Pedagogy
Units: Variable.

Prerequisite: Counter Registration Required.

MUEP 191, 391, 591, 691
Directed Study in Music Education and Pedagogy
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

MUEP 195, 395, 595, 695
Internship in Music Pedagogy
An experience-based project in music developed in consultation with a designated supervisor and a conservatory faculty member, comprising a work component and an academic component. The academic component of the internship, carried out under the supervision of the faculty member, may include readings related to the substance of the internship, discussions with the faculty member, and a written report or other culminating project appropriate to the discipline. Units: Variable.

Prerequisite: Counter Registration Required.

MUEP 399, 599, 699
Independent Study in Music Pedagogy
Students considering an honors project should register for independent study for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

CONSERVATORY OF MUSIC

Courses

Music History

MUHI 100
Introduction to Music Literature
Lectures and guided listening for the non-music major, introducing musical materials, basic musical concepts, and a variety of styles and types of music. Consideration of the place of music in society, past and present. Does not satisfy course requirements for any music major. Units: 6.

MUHI 110
Topics in Music History for the Non-Major
An exploration of a musicological topic that is more narrowly focused than or lies outside the scope of the Introduction to Music Literature course. May be repeated with consent of the instructor. Does not satisfy course requirements for any music major. Units: 6.

MUHI 120
Introduction to Jazz History
An exploration of the musical development and cultural impact of jazz from its origins to the present for students not majoring in music. Lectures, films, and readings provide historical details. Does not satisfy course requirements for any music major. Units: 6.

MUHI 131
The Grand Tour: Musical Taste and Manners in Europe 1600-1750
A study of music in the Baroque period, its social and historical context and relationship to other arts. The course explores the depth and variety of 17th and 18th century musical life and follows a broad range of interests to suit both music majors and non-specialists. Museum visits and weekly concerts, with accompanying lectures; demonstrations by performers active in the field of historical performance practice; and readings on form, style, and the lives of composers. The course is general in scope, and no prior musical knowledge is expected. Does not satisfy course requirements for any music major. Not open to students who have previously recieved, or need to receive credit for MUHI 431.*Offered at the London Centre.* Units: 6.

Prerequisite: Must be attending the Lawrence London Centre.

MUHI 135
The British Musical Renaissance: Elgar, Vaughan Williams, and Britten
An introduction to British music in the first three-quarters of the 20th century. In addition to studying major works by Elgar, Vaughan Williams, and Britten, students will explore the social and political currents as they impinged on musical life in Britain. A number of concerts and outside visits will be organized, and students will be encouraged to attend relevant performances in London, for which they will be prepared in class. The course will be general in scope, and no prior musical knowledge will be expected. Does not satisfy course requirements for any music major. Not open to students who have previously received, or need to receive credit for MUHI 435. *Offered at the London Centre.* Units: 6.

Prerequisite: Must be attending the Lawrence London Centre.

MUHI 136
Gilbert & Sullivan and Their Victorian World
An exploration of Victorian culture, including music, art, theatre, politics, and daily life as reflected in the operettas of Gilbert and Sullivan. *Offered at the London Centre.* Units: 6.

Prerequisite: Must be attending the Lawrence London Center

MUHI 137
Opera in Context
This course will explore the literary and historical inspirations for great operas, giving particular attention to operas and related plays being offered in London during the fall of 2007. Some operas are derived from literary sources, such as Britten's *The Turn of the Screw* (being produced by English National Opera), based upon the gothic psychological thriller of Henry James. Others, such as Mozart's *The Magic Flute* (also coming to ENO), with its many connections to Masonry and enlightenment philosophy, are a rich source of both literary and historical/cultural interest. Other operas to be studied will depend upon the offerings of London theater companies. The structure of opera libretti will be compared to their literary sources, and the role of music in advancing the drama will be examined. This course is designed for a general student population, and does not require a background in music. *Offered at the London Centre.* Units: 6.

Prerequisite: Must be attending the Lawrence London Center

MUHI 150
The Culture of Music in Germany
After considering the role of music in the construction of “Germanness,” the course focuses on the evolution of the “Lied” from folk song to the artistic “Lieder” and on contemporary popular music. Songs from the 18th to the 20th century are treated primarily as texts and cultural artifacts. Does not satisfy course requirements for any music major. Units: 6.

Also listed as German 275

Prerequisite: GER 202 or consent of the instructor

MUHI 201
Music History Survey I
A survey of Western music and introduction to the historical study of musical styles from the Middle Ages through the mid-18th century. Music majors are encouraged to enroll during the sophomore year. Units: 6.

Prerequisite: MUTH 251 or consent of instructor

MUHI 202
Music History Survey II
A survey of Western music and musical styles from the mid-18th century to the present. Music majors are encouraged to enroll during the sophomore year. Units: 6.

Prerequisite: MUHI 201 or consent of instructor

CONSERVATORY OF MUSIC

MUHI 210
Topics in Music History for the Non-major
This course will enable non-music majors to engage with the discipline of music history. Does not satisfy course requirements for any music major.

Topic for Fall 2010: National Identity and the American Musical From its origins in vaudeville and minstrel shows to the present day, musicals have participated in the formation of American national identity. This course will examine the relationship between music theater and politics and the changing face of national identity through a historical survey of the American musical. This course will not satisfy an upper-level music history requirement for music majors.

Topic for Spring 2011: American Popular Music

Units: 6.
Prerequisite: Sophomore standing

MUHI 211
Romanticism Then and Now
An interdisciplinary investigation of the powerful and enduring influence of Romanticism in the arts. The course will connect formative examples of poetry (Wordsworth, Keats), music (Beethoven, Schubert), and visual arts (Blake, Turner) to each other and to their late romantic and neo-romantic progeny, in conjunction with select live performances and field trips to historic sites and museums. This course is general in scope and no prior musical knowledge is expected. Units: 6.

Prerequisite: Must be attending the Lawrence London Centre

MUHI 223
Music & Mystical Experience
What is mystical experience? And how does music evoke, induce, or otherwise bring us into relation with it? These questions motivate a cross-cultural, multi-disciplinary, and diachronic exploration of the ways in which human beings experience the numinous through music. In the spirit of its title, the course also introduces specific contemplative practices in order to cultivate qualities of mind conducive to contemplative engagement with music and sound. Units: 6.

Prerequisite: Sophomore standing

MUHI 245
American Popular Music and Culture
Examination of the relationship between popular music and the broader cultural climate of the U.S. in the 20th and 21st centuries. Consideration of a selected body of popular music alongside the socio-political forces that have driven it: patriotism, racial tensions, civil rights, human rights, gay rights, feminism, activism, and class struggles. Units: 6.

Prerequisite: Sophomore standing

MUHI 411
Aesthetics of Music
A study of what can reasonably be said or written about music, critically examining many of the typical late Western assumptions often made of it, *e.g.,* that music is an art, that it involves the production of works, that it is expressive, that it is a universal language. Open to music majors and non-majors. Previous music study helpful but not required. Units: 6.

Prerequisite: Sophomore standing

MUHI 421
Music and Gender
This course will explore the relationship between music and gender in the Western world from the Middle Ages to the present. Considering classical and popular music, including music videos and film, as well as writings about gender and music, we will explore music's role as a reflection of, reaction to, and active participant in gender construction. Units: 6.

Also listed as Gender Studies 421

Prerequisite: MUHI 201 and MUHI 202

MUHI 422
Borrowed Music in the Movies
When a film uses a pre-existing piece of music (popular or classical), meanings multiply, both within and outside the film itself. This course will explore these meanings, focusing on the fluid and reciprocal relationship between film and the music it borrows. Units: 6.

Also listed as Film Studies 422

Prerequisite: MUHI 201 and MUHI 202

MUHI 423
Music and Mystical Experience
What is mystical experience? And how does music evoke, induce, or otherwise bring us into relation with it? These questions motivate a cross-cultural, multi-disciplinary, and diachronic exploration of the ways in which human beings experience the numinous through music. Readings from contemporary and historical sources in eastern and western philosophy, psychology, and the history and theory of music provide intellectual and aesthetic contexts in which to engage with a variety of musical practices and traditions. In the spirit of its title, the course also requires a commitment to specific contemplative practices—not bound to any particular belief system—that are introduced in an effort to cultivate qualities of mind conducive to contemplative engagement with a work of music or the experience of sound. Units: 6.

Prerequisite: MUHI 202

MUHI 431
The Grand Tour: Musical Tastes and Manners in Europe 1600-1750
A study of music in the Baroque period, its social and historical context and relationship to other arts. The course explores the depth and variety of 17th and 18th century musical life and follows a broad range of interests to suit both music majors and non-specialists. Museum visits and weekly concerts, with accompanying lectures; demonstrations by performers active in the field of historical performance practice; and readings on form, style, and the lives of composers. This course is a seminar involving independent research. Not open to students who have previously received credit for MUHI 131. *Offered at the London Centre.* Units: 6.

Prerequisite: Must be attending the Lawrence London Centre. MUHI 201 AND 202

MUHI 435
The British Musical Renaissance: Elgar, Vaughn Williams, and Britten
An introduction to British music in the first three-quarters of the 20th century. In addition to studying major works by Elgar, Vaughan Williams, and Britten, students will explore the social and political currents as they impinged on musical life in Britain. A number of concerts and outside visits will be organized, and students will be encouraged to attend relevant performances in London, for which they will be prepared in class. This course is a seminar involving independent research. Not open to students who have previously received credit for MUHI 135. *Offered at the London Centre.* Units: 6.

Prerequisite: Must be attending the Lawrence London Centre. MUHI 201 AND 202

MUHI 440
Topics in Music History: Life and Works
A study of a composer's career, emphasizing the relationship between composer and society. Topics in this series vary from year to year. May be repeated with consent of the instructor.

Topics: Monteverdi
This course will examine Claudio Monteverdi and his music from multiple perspectives to reveal his place in the artistic, social, and political world of early modern Italy.

Units: 6.

Prerequisite: MUHI 202

MUHI 441
Debussy: Contextual Perspectives
This course will examine Debussy and his music from a broad cultural perspective in order to reveal the connections between the music and the political, social, and artistic world in which it was created and received, and to use these connections to consider alternative paths of musical interpretation. Units: 6.

Prerequisite: MUHI 201 and MUHI 202

MUHI 450
Topics in Music History: Genre History
An examination of the historical development of a single genre, stressing the effects of societal changes. Topics in this series vary from year to year. May be repeated with consent of instructor.

Topic for Fall 2010: National Identity and American Musical From its origins in vaudeville and minstrel shows to the present day, musicals have participated in the formation of American national identity. This course will examine the relationship between music theater and politics and the changing face of national identity through a historical survey of the American musical.

Topic for Winter 2011: History of the Symphony

Units: 6.
Prerequisite: MUHI 202

MUHI 451
History of the String Quartet
Composers have used the string quartet genre to express some of their most profound and daring musical thoughts since the late 18th century and up to the present day. Through readings and analysis, students will explore how this repertoire and its audiences have been shaped by sociological and aesthetic forces. Units: 6.

Prerequisite: MUHI 202

MUHI 452
History of the Wind Band
This course will be an examination of the history and development of the wind band as an artistic medium, focusing on repertoire and instrumentation development and cultural influences. The growth of the modern concert wind ensemble will be studied as a part of the evolution beginning with Gabrieli and proceeding through classical, romantic, and contemporary musical trends. Units: 6.

Prerequisite: MUHI 202

MUHI 453
Opera and Betrayal
This course will examine different modes of betrayal (for example, at the plot, music, or production level) within opera from the 17th century to the present and explore possible meanings conveyed by operas relative to specific societal contexts and ideals, past and present. Units: 6.

Prerequisite: MUHI 201 and MUHI 202

MUHI 455
Jazz History
A study of the contributions of select jazz artists through analysis of recordings, historical films, solo transcriptions, scores, and readings from texts. Units: 6.

Prerequisite: MUHI 202 or consent of instructor

MUHI 460
Topics in Music History: Cultural Moments
A study of a particular time and place, examining the relationship between social institutions, intellectual ideas, and music products. Topics in this series vary from year to year. May be repeated with consent of instructor.

Topic for Fall 2010: Music and Modernism

Topic for Winter 2011: Music and Colonialism in the Age of Exploration
This course will explore the role of music in colonial encounters from the 15th through the 18th centuries and the complex musical exchanges between colonizers and the colonized in New Spain, North America, and the Far East. Units: Variable.
Prerequisite: MUHI 202

MUHI 461
The English Musical Renaissance
A study of the remarkable period in British music, roughly 1870-1970, now commonly called the English musical renaissance. Important relationships between social, intellectual, and musical currents will be examined through critical reading, discussion, and analysis of selected works by three major composers: Edward Elgar, Ralph Vaughan Williams, and Benjamin Britten. Units: 6.

Prerequisite: MUHI 202

MUHI 462
America After Modernism
An examination of American composers' responses to modernist values and practices in music from the 1960s to the present. Through the study of important musical compositions of the era and reading of composers' writings, students will forge an informed, critical response to post-Modernist era aesthetics and values in music. Units: 6.

Prerequisite: MUHI 202

MUHI 465
The Second Viennese School: Schoenberg, Berg, Webern
This course has as its principal focus the three great figures of the so-called "Second Viennese School": Schoenberg, Berg, and Webern. It includes not only a detailed study of their lives and works but also consideration of the cultural milieu from which they emerged and which they in turn influenced profoundly. Units: 6.

Prerequisite: MUHI 202

MUHI 490
Topics in Ethnomusicology
An examination of a particular topic in ethnomusicology. Topics and prerequisites may vary from course to course.

Topic for Fall 2010: Music of India and the Middle East
Topic for Fall 2010: Music and Gender
Topic for Winter 2011: Music and Tourism
Topic for Spring 2011: Music and the Environment
Units: 6.
Prerequisite: Sophomore standing or consent of instructor

MUHI 491
Introduction to World Music & Culture
Introduces ethnomusicological concepts and methods used to study music and musicians in cultural context. Students will broaden their awareness of musical aesthetics, instruments, tuning systems, rhythmic and formal structures, and performance practices through exploration of music traditions from a variety of locations around the world. Students will apply these ideas in conducting their own musical ethnographic projects. Units: 6.

Prerequisite: Sophomore standing or consent of the instructor

MUHI 492
The Space and Place of Ethnomusicology
Examines the discipline of ethnomusicology from the perspective of the local musical context. We will discuss and practice the methods and theories that are useful in studying music in our current space, place and time. Will also consider the role of music-making in the cultural construction of places, spaces and scenes and vice-versa. Units: 6.

Prerequisite: One course in music history, ethnomusicology, or anthropology; or consent of the instructor

MUHI 390, 590, 690
Tutorial in Studies Music History
Units: Variable.

Prerequisite: Counter Registration Required.

MUHI 191, 391, 591, 691
Directed Study in Music History
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

MUHI 195, 395, 595, 695
Internship in Music History
An experience-based project in music developed in consultation with a designated supervisor and a conservatory faculty member, comprising a work component and an academic component. The academic component of the internship, carried out under the supervision of the faculty member, may include readings related to the substance of the internship, discussions with the faculty member, and a written report or other culminating project appropriate to the discipline. Units: Variable.

Prerequisite: Counter Registration Required.

MUHI 399, 599, 699
Independent Study in Music History
Students considering an honors project should register for independent study for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

Applied Music Individual Instruction

Registration for individual music instruction is by permission of the instructor based oninterview or audition. Instruction is offered in the following areas: piano, organ, voice, violin,viola, violoncello, doublebass, guitar, flute, oboe, clarinet, saxophone, bassoon, horn,trumpet, trombone, euphonium, tuba, harpsichord, percussion, and jazz studies.

Students should select the appropriate course level based on the information given below. Students requesting non-required lessons are accommodated to the extent faculty schedules permit. Studio assignments for B.Mus. degree candidates are determined upon matriculation. Other students should contact the Conservatory Office about a studio assignment.

Students register for the appropriate studio section each term. Section information is published in the class schedule on the Web. The instructor's approval is required for registration.

Bachelor of Music students and Bachelor of Arts in music students registered for applied individual instruction are required to attend weekly studio classes.

Elementary (MUIN 102-120)
Individual, year-long instruction for beginning students who are B.A. degree candidates not majoring in music. The three-class series must be completed in a single academic year for a total of 6 units to be awarded. Credit is awarded upon completion of the third term only. Interested students must contact the Conservatory Office for a studio assignment which is required for registration. Units: 2.

Prerequisite: Credit awarded upon completion of three terms of study

MUIN 102 Organ/103 Voice/104 Violin/105 Viola/106 Cello/107 Doublebass/
108 Guitar/109 Flute/110 Oboe/111 Clarinet/112 Saxophone/113 Bassoon/114 Horn/
115 Trumpet/116 Trombone/117 Euphonium/119 Tuba/119 Harpsicord/120 Percussion

CONSERVATORY OF MUSIC

Standard (MUIN 301-320, 329)

Private instruction tailored to the individual student. These courses are not appropriate for beginning students, who should enroll for the elementary level. Studio assignments for B.Mus. students are determined upon matriculation. B.Mus. students adding a second instrument and other interested students should contact the Conservatory Office for a studio assignment before attempting to register. Units: 3 OR 6.

MUIN 301 Piano/302 Organ/303 Voice/304 Violin/305 Viola/306 Cello/307 Doublebass/308 Guitar/309 Flute/310 Oboe/311 Clarinet/312 Saxophone/313 Bassoon/314 Horn/315 Trumpet/316 Trombone/317 Euphonium/318 Tuba/319 Harpsicord/320 Percussion/329 Jazz Studies

MUIN 355
London Studio Instruction
Individual instruction in music at the London Centre. Units: 3.

Prerequisite: Must be attending the Lawrence London Centre.

MUIN 390, 590, 690
Tutorial in Individual Performance Instruction
Units: Variable.

Prerequisite: Counter Registration Required.

MUIN 191, 391, 591, 691
Directed Study in Individual Performance Instruction
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Regristration Required.

MUIN 399, 599, 699
Independent Study in Individual Performance Instruction
Units: Variable.

Prerequisite: Counter Registration Required.

CONSERVATORY OF MUSIC

Courses

Music Repertoire and Performance Studies

MURP 101
Elementary Piano
A beginning piano course for students without formal piano study and those returning to piano study after an extended absence. Reading of musical notation, terms, and symbols; basic technique; basic keyboard theory; exploration of diverse repertoire. Does not satisfy requirements of any music major. 2 units per term, awarded only upon completion of three terms of study. Consent of instructor required to ensure proper placement. May be repeated for credit. Units: 2.

Prerequisite: Credit awarded upon completion of three terms of study

MURP 151
Intermediate piano
Intermediate-level piano class for students who have completed MURP 101 or have reached a similar level of advancement. Does not satisfy requirements of any music major. Placement determined by audition (two pieces in contrasting styles, at least the level of the Bach Minuets or the easiest Schumann pieces from *Album for the Young*); consent of instructor required to ensure proper placement. May be repeated for credit. Units: 2.

Prerequisite: MURP 101

MURP 161
Organ Class
An introduction to organ study for students who have achieved at least the intermediate level of piano studies. The course will include development of coordination between manuals and pedals, performance practice, and style issues for Early and Romantic music, improvisation, and hymn playing. May be repeated for credit. Units: 3.

MURP 171
Balinese Gamelan Music
Open to all students. Gamelan is a type of traditional percussion and wind ensemble from Indonesia. This course offers study and performance of Balinese classical instrumental pieces, dance accompaniment, and contemporary works. May be repeated for credit. Units: 1.

MURP 201
Basic Keyboard Skills I
Sight-reading, keyboard harmony, transposition, improvisation, technique, and selected repertoire. Students must demonstrate proficiency at each level before advancing to the next level. Completion of MURP 203 or demonstrated equivalent required of all Bachelor of Music degree candidates and Bachelor of Arts degree candidates with a major in music. Audition for placement required. 1 unit per term. *Note:* Required in the freshman year of all Bachelor of Music degree students whose performance area is not a keyboard instrument. BKS grades are factored into grade-point averages, but credit does not apply toward requirements for the Bachelor of Music degree. BKS must be completed successfully by the end of the sophomore year. (Music majors and minors are registered for BKS until the requirement has been

completed.) Students who do not complete requirements in four terms of study are charged a fee of $75 in each successive term until all requirements are met. Units: 1.

MURP 202
Basic Keyboard Skills II
Sight-reading, keyboard harmony, transposition, improvisation, technique, and selected repertoire. Students must demonstrate proficiency at each level before advancing to the next level. Completion of MURP 203 or demonstrated equivalent required of all Bachelor of Music degree candidates and Bachelor of Arts degree candidates with a major in music. Audition for placement required. 1 unit per term. *Note:* Required in the freshman year of all Bachelor of Music degree students whose performance area is not a keyboard instrument. BKS grades are factored into grade-point averages, but credit does not apply toward requirements for the Bachelor of Music degree. BKS must be completed successfully by the end of the sophomore year. (Music majors and minors are registered for BKS until the requirement has been completed.) Students who do not complete requirements in four terms of study are charged a fee of $75 in each successive term until all requirements are met. Units: 1.

MURP 203
Basic Keyboard Skills III
Sight-reading, keyboard harmony, transposition, improvisation, technique, and selected repertoire. Students must demonstrate proficiency at each level before advancing to the next level. Completion of MURP 203 or demonstrated equivalent required of all Bachelor of Music degree candidates and Bachelor of Arts degree candidates with a major in music. Audition for placement required. 1 unit per term. *Note:* Required in the freshman year of all Bachelor of Music degree students whose performance area is not a keyboard instrument. BKS grades are factored into grade-point averages, but credit does not apply toward requirements for the Bachelor of Music degree. BKS must be completed successfully by the end of the sophomore year.

(Music majors and minors are registered for BKS until the requirement has been completed.) Students who do not complete requirements in four terms of study are charged a fee of $75 in each successive term until all requirements are met. Units: 1.

MURP 211
Keyboard Skills for Music Educators I
Upper-level keyboard proficiency course for students enrolling in a music education emphasis that includes general music. Units: 1.

Prerequisite: MURP 203 or equivalent

MURP 212
Keyboard Skills for Music Educators II
Upper-level keyboard proficiency course for students enrolling in a music education emphasis that includes general music. Units: 1.

Prerequisite: MURP 211

MURP 235
Bow Technique for String Players
Students will acquire intellectual and physical understanding of the bow and bowing techniques, including baroque techniques, through observation, technical analysis, and performance practice. Units: 3.

MURP 271
Introduction to Vocal Studies
An overview of classical singing, including anatomy and physiology of the voice, basic vocal acoustics, voice health, and an introduction to historical singing terminology. Units: 1.

Prerequisite: Concurrent registration in voice lessons

MURP 272
English Singing Diction
An introduction to English singing diction, including identification of problematic American regionalisms and basic elements of English poetics. The International Phonetic Alphabet is learned as a tool for work in this and subsequent singing diction classes. Units: 1.

Prerequisite: Concurrent registration in voice lessons

MURP 273
Italian and Latin Singing Diction
An introduction to Italian singing diction with special attention given to sounds problematic for English speakers. Brief study of the pronunciation of ecclesiastical Latin. Units: 1. Prerequisite: Concurrent registration in voice lessons

MURP 274
German Singing Diction
An introduction to German singing diction, with special attention to sounds problematic for English speakers. Expressive use of the language in Lied interpretation begun. Units: 1.

Prerequisite: Concurrent registration in voice lessons

MURP 275
French Singing Diction
An introduction to French singing diction, with special attention to sounds problematic for English speakers. Expressive use of the language, using appropriate mélodie texts, begun. Units: 1.

Prerequisite: Concurrent registration in voice lessons

MURP 276
Recitative
An introduction to the performance practices of the pre-Romantic recitative, emphasizing the secco style. Critical listening to a variety of recorded examples and individualized selection, preparation, and coaching of appropriate examples of Baroque and Classic recitatives. Units: 1.

Prerequisite: Concurrent registration in voice lessons

MURP 280
Introduction to Vocal Jazz Techniques
An introduction to vocal jazz techniques through the study and performance of five or six songs that will be manipulated rhythmically, melodically, and stylistically. Listening and improvisation will be included. Units: 1.

MURP 301
Functional Skills for Keyboard Majors I
Development of functional keyboard skills. Sight-reading, score-reading, transposition, keyboard harmony, playing by ear, improvisation, and conducting from the keyboard. FKS grades are factored into grade-point averages, but credit does not apply toward requirements for the Bachelor of Music degree. Units: 1.

MURP 302
Functional Skills for Keyboard Majors II
Development of functional keyboard skills. Sight-reading, score-reading, transposition, keyboard harmony, playing by ear, improvisation, and conducting from the keyboard. FKS grades are factored into grade-point averages, but credit does not apply toward requirements for the Bachelor of Music degree. Units: 1.

MURP 311
Fretboard Harmony for the Classical Guitarist I
Study of intervals, chord construction, and voice leading, using exercises and examples from the standard guitar repertoire. Practical application to sight-reading, arranging, memorization, and articulation of musical ideas. Open to all guitar students and to others by consent of instructor. Units: 1.

MURP 312
Fretboard Harmony for the Classical Guitarist II
Study of intervals, chord construction, and voice leading, using exercises and examples from the standard guitar repertoire. Practical application to sight-reading, arranging, memorization, and articulation of musical ideas. Open to all guitar students and to others by consent of instructor. Units: 1.

MURP 313
Fretboard Harmony for the Classical Guitarist III
Study of intervals, chord construction, and voice leading, using exercises and examples from the standard guitar repertoire. Practical application to sight-reading, arranging, memorization, and articulation of musical ideas. Open to all guitar students and to others by consent of instructor. Units: 1.

MURP 320
Functional Jazz Piano
An introduction to jazz piano voicings, basic piano comping techniques, and the role of the keyboard in the jazz rhythm section. Designed to accommodate upperclass students who have been admitted to the Bachelor of Music degree program with an emphasis in jazz studies, sophomore Bachelor of Music students planning to apply for the emphasis in jazz studies, and experienced student jazz performers with consent of instructor. Units: 3.

Prerequisite: MUCA 222 or consent of the instructor

MURP 330
Orchestral Literature for Strings
The course prepares string players for the unique challenges of life in a professional symphony orchestra and will complement work done in university ensembles and private instrumental instruction. Students will learn specific techniques through multiple performance opportunities, class discussion, readings and assigned listening. Units: 3.

MURP 405
Senegalese Music
This course is part of the Lawrence Francophone Seminar in which students study in French-speaking West Africa for ten weeks. Units: 3.

Also listed as French 404

Prerequisite: Must be attending the LU Francophone Seminar

MURP 420
Piano Accompaniment: Vocal
Vocal accompanying for the advanced pianist, including art song, opera recitative, and aria. Performances required of all participants. Units: 3.

MURP 425
Piano Accompaniment: Instrumental
Instrumental accompanying for the advanced pianist, including duo sonatas and concerto orchestral reductions. Performances required of all participants. Units: 3.

MURP 451
Literature of the Piano I
A two-term historical survey of the repertoire from 1600 to the present, with consideration of performance practice and broader historical context. Lectures, readings, listening, analysis, performance, and written assignments. Units: 6.

Prerequisite: Consent of instructor

MURP 452
Literature of the Piano II
A two-term historical survey of the repertoire from 1600 to the present, with consideration of performance practice and broader historical context. Lectures, readings, listening, analysis, performance, and written assignments. Units: 6.

Prerequisite: MUPR 451

MURP 455
Vocal Literature
An introductory survey of the history and literature of the solo singer from antiquity to the present. Units: 3.

Prerequisite: Junior standing or consent of instructor

MURP 480
Advanced Conducting
Intended to give students more experience with score study, rehearsal techniques and conducting vocabulary through weekly podium time and class discussion. Advanced Conducting will continue the topics covered in Conducting Principles. Basic knowledge of beat patterns and gestural vocabulary will be assumed and students will explore conducting in the orchestral, band, choral and mixed media. Units: 3 OR 6.

Prerequisite: MUEP 380

MURP 390, 590, 690
Tutorial Studies in Music Repertoire and Performance
Units: Variable.

Prerequisite: Counter Registration Required.

MURP 191, 391, 591, 691
Directed Study in Music Repertoire and Performance Studies
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Regristration Required.

MURP 195, 395, 595, 695
Internship in Music Repertoire and Performance Studies
An experience-based project in music developed in consultation with a designated supervisor and a conservatory faculty member, comprising a work component and an academic component. The academic component of the internship, carried out under the supervision of the faculty member, may include readings related to the substance of the internship, discussions with the faculty member, and a written report or other culminating project appropriate to the discipline. Units: Variable.

Prerequisite: Counter Registration Required.

MURP 399, 599, 699
Independent Study in Music Repertoire and Performance
Students considering an honors project should register for independent study for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

CONSERVATORY OF MUSIC

Courses

Music Theory

MUTH 100
Music Theory for the Non-Major
An introduction to the fundamentals of music: notation, scales, intervals, chords, keys, and basic harmonic and contrapuntal concepts. Improvement of reading skills and performance through an understanding of music's structure and notation. Does not apply toward any music major. Units: 3.

MUTH 151
Music Fundamentals, Theory, and Analysis 1
An intensive version of MUTH 201, 202, this course provides a thorough grounding in music fundamentals followed by a comprehensive introduction to tonal harmony, counterpoint, and associated formal procedures. The two terms are taken in sequence. Placement determined by the Music Theory Placement Exam (administered during Welcome Week). Corequisites: MUTH 161, 171 Units: 6.

Prerequisite: Placement Corequisites: MUTH 161, 171

MUTH 152
Music Fundamentals, Theory, and Analysis 2
An intensive version of MUTH 201, 202, this course provides a thorough grounding in music fundamentals followed by a comprehensive introduction to tonal harmony, counterpoint, and associated formal procedures. The two terms are taken in sequence. Placement determined by the Music Theory Placement Exam (administered during Welcome Week). Corequisites: MUTH 162, 172. Units: 6.

Prerequisite: MUTH 151 Corequisites: MUTH 162, 172

MUTH 161
Aural Skills Fundamentals 1
Intensive ear training commensurate with MUTH 151, 152. Taken in sequence. Placement determined by the Music Theory Placement Exam (administered during Welcome Week). Credit does not count toward the B.Mus degree. Corequisites: MUTH 151, 171 Units: 2.

Prerequisite: Placement Corequisites: MUTH 151, 171 Credit does not count toward the B. Mus. degree

MUTH 162
Aural Skills Fundamentals 2
Intensive ear training commensurate with MUTH 151, 152. Taken in sequence. Placement determined by the Music Theory Placement Exam (administered during Welcome Week). Credit does not count toward the B.Mus degree. Corequisites: MUTH 152, 172. Units: 2.

Prerequisite: MUTH 161 Corequisites: MUTH 152, 172 Credit does not count toward the B.Mus degree

MUTH 171
Sight Singing Fundamentals 1
Sight singing commensurate with MUTH 151, 152. Placement determined by placement into the corequisite course. Credit does not count toward the B.Mus. degree. Corequisites: MUTH 151, 161. Units: 1.

Prerequisite: Placement Corequisites: MUTH 151, 161 Credit does not count toward the B. Mus. degree

MUTH 172
Sight Singing Fundamentals 2
Sight singing commensurate with MUTH 151, 152. Placement determined by placement into the corequisite course. Credit does not count toward the B.Mus. degree. Corequisites: MUTH 152, 162. Units: 1.

Prerequisite: MUTH 171 Corequisites: MUTH 152, 162 Credit does not count toward the B. Mus. degree

MUTH 201
Music Theory and Analysis 1
A comprehensive introduction to the structural principles and compositional techniques of art music from the 18th and 19th centuries. Emphasis on diatonic harmony and elementary counterpoint through written exercises, model composition, and analysis. Introduction to the basic formal procedures associated with tonal music. Taken in sequence, MUTH 201 and 202 are the first two courses in the five-term music theory core. Placement determined by the Music Theory Placement Exam (administered during Welcome Week). Corequisites: MUTH 211 and 221 Units: 4.

Prerequisite: Placement Corequisites: MUTH 211, 221

MUTH 202
Music Theory and Analysis 2
A comprehensive introduction to the structural principles and compositional techniques of art music from the 18th and 19th centuries. Emphasis on diatonic harmony and elementary counterpoint through written exercises, model composition, and analysis. Introduction to the basic formal procedures associated with tonal music. Taken in sequence, MUTH 201 and 202 are the first two courses in the five-term music theory core. Placement determined by the Music Theory Placement Exam (administered during Welcome Week). Corequisites: MUTH 212 and 222. Units: 4.

Prerequisite: MUTH 201 Corequisites: MUTH 212, 222

MUTH 211
Aural Skills 1
Ear training commensurate with MUTH 201. Melodic, harmonic, and contrapuntal dictation, error detection, and aural perception of basic formal procedures. Taken in sequence. Placement and section assignment determined by the Music Theory Placement Exam (administered during Welcome Week). Corequisites: MUTH 201, 221 Units: 1.

Prerequisite: Placement Corequisites: MUTH 201, 221

MUTH 212
Aural Skills 2
Ear training commensurate with MUTH 202. Melodic, harmonic, and contrapuntal dictation, error detection, and aural perception of basic formal procedures. Taken in sequence. Placement and section assignment determined by the Music Theory Placement Exam (administered during Welcome Week). Corequisites: MUTH 202, 222. Units: 1.

Prerequisite: MUTH 211 Corequisites: MUTH 202, 222

MUTH 221
Sight Singing 1
Sight singing commensurate with MUTH 201. Solo and ensemble singing using solfège; treble and bass clefs only. One- and two-part rhythmic exercises. Improvisation. Taken in sequence. Placement and section assignment determined by sight-singing audition (conducted during Welcome Week). Corequisites: MUTH 201, 211 Units: 1.

Prerequisite: Placement Corequisites: MUTH 201, 211

MUTH 222
Sight Singing 2
Sight singing commensurate with MUTH 202. Solo and ensemble singing using solfège; treble and bass clefs only. One- and two-part rhythmic exercises. Improvisation. Taken in sequence. Placement and section assignment determined by sight-singing audition (conducted during Welcome Week). Corequisites: MUTH 202, 212. Units: 1.

Prerequisite: MUTH 221 Corequisites: MUTH 202, 212

MUTH 240
Jazz Theory and Aural Training
A comprehensive introduction to jazz scales, modes, chords, harmonic progressions, nomenclature, and notation. Emphasis on linking essential jazz theoretic functions to performance practice, composition, and arranging. Units: 3.

MUTH 251
Music Theory and Analysis 3
Continued study of the harmonic techniques and structural principles of tonal music, with emphasis on chromatic harmony and contrapuntal elaboration through written exercises, model composition, and analysis. Introduction to large-scale formal procedures associated with 18th- and 19th-century art music. Part of the five-term music theory core, taken in sequence. Corequisites: MUTH 261, 271. Units: 4.

Prerequisite: MUTH 152 or MUTH 202 Corequisites: MUTH 261, 271

MUTH 252
Music Theory and Analysis 4
Continued study of the harmonic techniques and structural principles of tonal music, with emphasis on chromatic harmony and contrapuntal elaboration through written exercises, model composition, and analysis. Introduction to large-scale formal procedures associated with 18th- and 19th-century art music. Part of the five-term music theory core, taken in sequence. Corequisites: MUTH 262, 272. Units: 4.

Prerequisite: MUTH 251 Corequisites: MUTH 262, 272

MUTH 261
Aural Skills 3
Ear training commensurate with MUTH 251. Continued work in melodic, harmonic, and contrapuntal dictation, error detection, and aural perception of basic forms of tonal music. Taken in sequence. Section assignment determined by the music theory/composition department. Corequisites: MUTH 251, 271. Units: 1.

Prerequisite: MUTH 162 or MUTH 212 Corerequisites: MUTH 251, 271

MUTH 262
Aural Skills 4
Ear training commensurate with MUTH 252. Continued work in melodic, harmonic, and contrapuntal dictation, error detection, and aural perception of basic forms of tonal music. Taken in sequence. Section assignment determined by the music theory/composition department. Corequisites: MUTH 252, 272 Units: 1.

Prerequisite: MUTH 261 Corerequisites: MUTH 252, 272

MUTH 271
Sight Singing 3
Sight singing commensurate with MUTH 251. Continued solo and ensemble singing (modes, alto and tenor clefs added), rhythmic exercises, and improvisation. Taken in sequence. Section assignment determined by the music theory/composition department. Corequisites: MUTH 251, 261 Units: 1.

Prerequisite: MUTH 172 or MUTH 222 Corequisites: MUTH 251, 261

MUTH 272
Sight Singing 4
Sight singing commensurate with MUTH 252. Continued solo and ensemble singing (modes, alto and tenor clefs added), rhythmic exercises, and improvisation. Taken in sequence. Section assignment determined by the music theory/composition department. Corequisites: MUTH 252, 262. Units: 1.

Prerequisite: MUTH 271 Corerequisites: MUTH 252, 262

MUTH 301
Music Theory and Analysis 5
The final course in the music theory core curriculum. The first half of the course develops and refines analytic skills introduced earlier in the core, applying them to specific works of the tonal repertory. The second half provides an introduction to the structural principles and formal procedures of art music from the early 20th century to the present. Corequisites: MUTH 311, 321. Units: 4.

Prerequisite: MUTH 252 Corequisites: MUTH 311, 321

MUTH 311
Aural Skills 5
Ear training commensurate with MUTH 301. Section assignment determined by the music theory/ composition department. Corequisites: MUTH 301, 321. Units: 1.

Prerequisite: MUTH 262 Corequisites: MUTH 301, 321

MUTH 321
Sight Singing 5
Sight singing commensurate with MUTH 301. Section assignment determined by the music theory/ composition department. Corequisites: MUTH 301, 311. Units: 1.

Prerequisite: MUTH 272 Corequisites: MUTH 301, 311

MUTH 350
Topics in Music Analysis
Intermediate studies in music analysis, focusing on a particular analytic technique, critical approach, or repertory, such as Schenkerian analysis, text/music relations, analysis and performance, late nineteenth-century chomaticsm, or non-western music. Topics vary from year to year. May be repeated with consent of instructor.

Topic for Fall 2010: Shaping Time in Performance
This course will look at basic questions about how performers shape the flow of time, including choosing a primary pulse and shaping it expressively, finding the metrical strong points within a phrase, giving various moments of arrival appropriate relative weight, and relating multiple tempi. In looking at these questions we will see both how the score can inform performance and how recorded performances can inform our understanding of the score.

Topic for Spring 2011: Renaissance Counterpoint
An introduction to the dazzling contrapuntal artistry of European composers from the fifteenth and sixteenth centuries, including Dufay, Ockeghem, Josquin, Isaac, Palestrina, and Victoria. Analysis of masterworks and model composition in both vocal and instrumental styles are brought to life by in-class performance. Complementary study of performance practice, tuning, and temperament.

Units: 6.

Prerequisite: MUTH 301

MUTH 401
Counterpoint I
The first course in a two-term survey of the techniques of 18th-century counterpoint. Imitative and non-imitative counterpoint in two voices, leading to the composition of binary-form suite movements and two-voice inventions. Complementary work in analysis. Units: 6.

Prerequisite: MUTH 301 or consent of instructor

MUTH 402
Counterpoint II
A continuation of MUTH 401. Imitative counterpoint in three and four voices, leading to the composition of a four-voice fugue. Complementary work in analysis. Units: 6.

Prerequisite: MUTH 401

MUTH 411
Orchestration I
A study of the orchestral instruments, their capabilities, appropriate notation for each, and scoring for various small ensembles. Units: 6.

Prerequisite: MUTH 251

MUTH 412
Orchestration II
A continuation of MUTH 411. Scoring for larger ensembles, including wind ensemble and full orchestra. Units: 6.

Prerequisite: MUTH 411

MUTH 510
Analysis of 20th-Century Music
Studies of the styles and structural techniques of significant examples of 20th-century music. Units: 6.

Prerequisite: MUTH 301

MUTH 550
Topics in Music Analysis
Topic for Spring 2010: Music from Eastern Europe and the Former Soviet Union: 1970—Present
Eastern Europe has produced recently a variety of compelling musical thought, quite different from contemporaneous musical trends in Western Europe and the United States. This course will focus on the music of Ligeti (Hungary), Gubaidulina (Russia), Pärt (Estonia), Penderecki (Poland) and Schnittke (Russia), but will also look at music of other composers, with Kurtág, Gorécki, Ustvolskaya, Szymánski, Vasks and Etövös as possibilities. The course is primarily devoted to analysis and critical writing on this repertoire, with some discussion of political and cultural context. Units: 3 OR 6.

Prerequisite: MUTH 301

MUTH 390, 590, 690
Tutorial Studies in Music Theory
Units: Variable.

Prerequisite: Counter Registration Required.

MUTH 191, 391, 591, 691
Directed Study in Music Theory
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Units: Variable.

Prerequisite: Counter Registration Required.

MUTH 195, 395, 595, 695
Internship in Music Theory
An experience-based project in music developed in consultation with a designated supervisor and a conservatory faculty member, comprising a work component and an academic component. The academic component of the internship, carried out under the supervision of the faculty member, may include readings related to the substance of the internship, discussions with the faculty member, and a written report or other culminating project appropriate to the discipline. Units: Variable.

Prerequisite: Counter Registration Required.

MUTH 399, 599, 699
Independent Study in Music Theory
Students considering an honors project should register for independent study for one or more terms. Units: Variable.

Prerequisite: Counter Registration Required.

Student-Initiated Courses and Programs

Directed Study
Directed study follows a syllabus set primarily by the instructor to meet the needs or interests of an individual student or small group of students. The main goal of directed study is knowledge or skill acquisition, not research or creative work. Students may meet frequently with the faculty supervisor or work more independently, completing assignments according to a schedule agreed upon in advance. Typically several assignments and/or exams are used to evaluate student learning. Directed Study courses may be numbered 191, 391, 591 or 691.

Tutorials
A tutorial is a primarily student-driven course of study undertaken by an individual student or small group of students in collaboration with one or more faculty members. The primary goal of a tutorial is expansion, refinement, and synthesis of knowledge and abilities through in-depth exploration of a specific topic. Tutorials supplement regular course offerings, especially in the junior and senior years, by extending the curriculum in depth or breadth according to the intersecting interests of students and faculty members. Pedagogical approaches vary, but tutorials typically feature significant reading plus integrative writing, speaking, or performance assignments, problem solving, and discussion. Regular conferences (typically once or twice a week) with the supervising faculty member or members focus on presentation and critique of student work. Tutorials are numbered 390, 590, or 690.

A tutorial may be undertaken to satisfy personal academic interest, to prepare for advanced or graduate study, or to lay the groundwork for an independent study, senior experience, or honors project.

To illustrate the variety and scope of tutorial studies, many academic departments have listed a number of recent tutorial topics at the end of their departmental listings in the “Courses of Study” section of this catalog. Because tutorials develop out of student interest, these topics should not be construed as offerings but as samples of the topics students have recently elected to pursue.

Independent Study
Independent study carries the student beyond the established curriculum into largely student-directed work that in most disciplines is expected to result in the generation of new scholarship or the creation of a new work or performance. Scholarship may take the form of generating new information through research or a new conceptual formulation based on existing knowledge. Creative activity may result in a new composition or other work of art, or a new performance of an existing work. The nature of the faculty-student interaction, methodology and final work or performance may vary according to the goal of the project and the needs and preparation of the student. Through independent study, the student refines and applies abilities acquired in previous coursework while producing new work typical of the discipline. Independent studies are numbered 399, 599 or 699.

At the outset of independent study, the student and supervising faculty member should define and agree upon clear goals, plans for communicating and assessing progress, and criteria for evaluating the student’s work. For independent study lasting more than one term, the student and faculty member should discuss and assess progress at the end of each term. If either party concludes that it would not be beneficial for the student to continue, the student may be assigned a grade for completed or additionally assigned work and not be required to enroll for the next term. Students who continue into the next term may be assigned a temporary grade of

In Progress (IP), which will be replaced by the final grade assigned at the end of the independent study period.

Where appropriate, two students may engage in collaborative independent study, and an interdisciplinary independent study may involve more than one faculty mentor. Independent study may be undertaken to pursue a project of personal academic interest, to prepare for graduate study, to meet the requirements for a senior experience, or to complete work for an honors project.

Academic Internships
Lawrence recognizes that a student's education can be enhanced by the combination of academic and experience-based learning. Academic internships provide students an opportunity to apply what they have learned in the classroom and to bring back to the classroom an enriched perspective on their learning.

Where academic departments find that the interaction of academic pursuits and work experience is both appropriate to their relevant disciplines and feasible in terms of available work experiences, they normally offer academic internships. These internship courses are listed in this catalog under departmental offerings, and they are offered at differing levels of the curriculum. Where no departmental internship exists, student-designed internships may be proposed to the Committee on Instruction. Proposals must be submitted to the Committee on Instruction by the end of the fifth week of the term before the start of the internship.

Students may take a maximum of 12 units of academic internship in fulfillment of their major, minor, or graduation requirements. Academic internships require prior approval by the relevant academic department (in cases where a departmental internship is available) or by a faculty supervisor/academic department and the Committee on Instruction (in cases where a departmental internship is not available). Academic internships may be paid or unpaid.

Students enrolled in academic internships engage in work or service experiences with intentional learning objectives that promote reflection throughout the experience and that relate to their academic interests. Site and faculty supervisors work closely with the students and provide evaluations of the students' activities at the end of the internship.

The academic component of the internship includes readings related to the substance of the internship, discussions with the faculty supervisor, and a written report appropriate to the discipline. Course grades are based on this academic work.

Application forms for student-designed academic internships may be obtained from the offices of the provost and dean of the faculty, the dean of student academic services, and the registrar and from the Career Center and the Main Hall, Briggs Hall, conservatory, and art center faculty offices.

Click here for information on the Career Center and internships.

Student-Initiated Courses and Programs

Honors Projects

Honors projects are coherent programs of independent work carried on by students, usually in their senior year, on subjects or problems of more than ordinary difficulty in areas that they have studied in considerable depth, usually in their majors or closely related areas. Honors projects normally are supervised by faculty members in appropriate departments and may culminate in written theses based on extensive individual research or in pieces of original work in the creative or performing arts accompanied by written presentations.

All Lawrence faculty members may serve as supervisors of honors projects. If the honors-project supervisor is a non-voting member of the faculty, he or she should enlist a voting member of the faculty to serve as a co-sponsor of the proposed project and periodically consult with the co-sponsor as the project develops.

An examining committee evaluates the results of each project, conducts an oral examination of the honors candidate, and considers what constitutes the appropriate level of honors in view of the strengths and weaknesses of both the thesis and the oral defense. The Committee on Honors reviews the reports of all such examining committees and submits its recommendations for Honors in Independent Study to the faculty for final approval.

Since honors projects frequently complement students' work in their majors, they should discuss the opportunities for independent study with faculty members in their fields of concentration as early as possible in order to begin laying appropriate foundations in courses, tutorial work, and summer reading. In some fields, tutorials or courses in research methods can lead to the formulation of suitable thesis topics and methods of attack, while in other fields topics may stem from unanswered problems in regular courses, from students' own interests, or from teachers' suggestions. Whatever the field, students ought to keep in mind the possibility of doing honors projects as they plan their programs, especially in the junior year, or earlier if they will be off-campus at that time. Students do not have to take an independent-study course in order to submit an honors project.

Jointly written projects or theses undertaken jointly may be submitted for Honors in Independent Study. The work involved in such cases, however, must be equitably shared and demonstrate benefits clearly resulting from the merger of the authors' different skills and knowledge. Students considering joint projects or theses must obtain the consent of their faculty independent studies advisors and the Committee on Honors well in advance of such endeavors.

Procedures and guidelines

To apply for Honors in Independent Study, students must send to the Committee on Honors statements of their intentions to submit a thesis in candidacy for honors. These statements should include the Appleton addresses of the students, the topics of independent study, and both students' signatures and those of the faculty advisors. The final date for receipt of such statements of intent is announced each fall in a notice to all seniors; normally it falls in the first week of Term III. If students expect to complete their projects during Terms I or II, they must submit their statements of intent at least three weeks before the anticipated date for submission of their theses. No thesis will be considered for honors unless the committee has received such a statement of intent; however, statements do not obligate such students to submit theses.

Sufficient copies of the completed thesis, one for each member of the examining committee, including the Committee on Honors representative, are to be submitted to the Committee on

Honors at a place and by a date and hour designated each year, usually falling within the first few days of May. Students who find themselves unable to meet this deadline may petition the Committee on Honors for extensions, but they must do so well in advance of the deadline. The committee usually approves such petitions only when circumstances beyond the candidate's control have arisen.

At this point, the honors thesis advisor, in consultation with the student, arranges for an oral examination of the thesis. Results of the examination must be reported to the Committee on Honors prior to its last meeting.

Although the Committee on Honors tries to keep its procedures as simple as possible, the extreme diversity of projects submitted for honors makes necessary certain clarifications and interpretations of the basic guidelines. Some statements concerning special types of projects and further details about the committee's procedures are included here for reference by both faculty members and students.

The honors thesis
The thesis need not be of any special form or length, provided that its form is appropriate to the discipline to which it belongs. Students' advisors are responsible for providing guidance in regard to format and the conventions of scholarly documentation pertinent to their disciplines. Nevertheless, since all accepted theses are permanently retained in the Lawrence University library, their external form also is subject to a few standardized regulations suggested by the librarians and endorsed by the Committee on Honors. The chair of the committee may be consulted about these regulations.

Even though the committee permits candidates for honors to correct typographical errors or to make such other minor corrections as their examiners may require, it emphasizes that theses must be in final form when they are submitted early in May. Candidates must assume responsibility for accurate proofreading and checking of all quotations and references. Frequent misspellings, faulty punctuation or syntax, omitted references, or stylistic incoherence will disqualify projects despite the intrinsic merit they may otherwise exhibit.

The examining committee
The advisor, in consultation with the student and with the assent of the Committee on Honors, appoints an examining committee consisting of at least three voting faculty members, one of whom must be from outside the student's department; the advisor, if a voting member of the faculty, acts as one of the three voting members of the committee. If the advisor is a non-voting member of the faculty, the co-sponsor acts as one of the three examining committee members. The non-voting advisor attends the oral examination and participates in all aspects of the committee's discussion of the project except voting on whether to award honors and the level of honors to be awarded.

In addition, the Committee on Honors assigns a faculty representative to act as the non-voting moderator during the examination. At the discretion of the advisor, after consultation with the student, another Lawrence faculty member or an outside expert who is uniquely qualified to shed insight into the quality of the project may also attend the examination. These individuals may not take part in the decision-making process.

Student-Initiated Courses and Programs

Projects in the arts
Students interested in submitting an exhibition, performance, or work of art, music, theatre, or imaginative literature as an honors project must follow the normal procedures for honors work and must be willing to engage in a discussion of their work. A brief essay – as preface, foreword, introduction, afterword, postscript, or critical review – must accompany any such creative work. The essay should clarify and illuminate the work in a manner appropriate to genre, form, or medium and may include the aims of the project, its formal and stylistic precedents, its techniques, and the limitations and potential of the project. *In the arts, the project itself clearly remains the most important component to be evaluated by the examining committee.*

Supplementary guidelines for projects in the arts

- Keep in mind that honors in independent study are university awards.
- A project in the arts may be undertaken in any discipline (e.g., biology, physics, history, etc.)
- Evaluation of the project will focus on the project rather than the paper. The paper, however, should be well written and free of error, and its content should be accurate, meaningful, and appropriate to the project.
- The supplementary paper should be at least six to ten pages in length. (A longer paper may be submitted, of course, but again the focus will remain on the project.)
- A bibliography may or may not be necessary, depending on the content of the paper.
- If a project in the arts consists of a performance, some sort of audio-visual documentation (DVD, CD, photographs, etc.) must be included with the final project for archival purposes. A performance program should also be submitted.
- If the project is an art exhibition, an exhibition catalog must be submitted with the final project. Some sort of visual description (photographs, DVD, etc.) should also be included for archival purposes.
- If the project is web based, arrangements must be made to create an archive copy.

Projects involving testing of hypotheses
One important purpose of honors projects is to provide opportunities for professionals to evaluate students' knowledge of an area, their skill in employing that knowledge in experimentation, and their care and cleverness in approaching the task of testing their hypotheses. Thus, if a project allows these evaluations to be made, it should be considered for honors despite the vicissitudes of fortune that may attend the project. In particular, the failure to obtain significant positive results when testing an hypothesis or a network of hypotheses ought not to disqualify a candidate from achieving honors, provided that those professionally competent in the area agree that this failure was not due to a lack of care, to a lack of skill or knowledge in the field, or to a lack of competence in techniques or experimental design.

Mere diligence, on the other hand, is not a sufficient ground for the awarding of honors. Students whose projects have not achieved their expected results should give the best accounts they can of the ways in which they probed for additional operative variables that were uncontrolled in their previous experiments, of the reasons why the failures could not have been anticipated by skillful experimenters in the crucial beginning stages, and of their careful attempts to locate the difficulties.

Professional evaluations
The Committee on Honors avoids substituting its opinion for that of professionals on matters requiring professional competence for their evaluation. Nevertheless, the committee is of the firm opinion that the evaluation of honors candidates can and should be made independent of questions regarding whether a respected professional journal would publish a particular thesis. In other words, Honors in Independent Study is not limited to students whose work would compete successfully with that of their professors for publication in professional journals.

Criteria for Honors in Independent Study
The following criteria are used in evaluating all Honors in Independent Study projects:

Cum Laude - Honors with distinction

To achieve honors, the project must fulfill all of the following criteria:

a. Each of the three components of the project (the work, the written exposition, and the oral examination) demonstrates a substantial knowledge of, and facility with, previous work, underlying principles, and central concepts or theories in areas relevant to the project.
b. The paper must clearly show that the student has established an original thesis or hypothesis, an original interpretation or analysis, a substantial and original synthesis or innovative pedagogical exposition of a sophisticated body of established work or has created a new work of art. In other words, the student must demonstrate that the project does not merely replicate, review, paraphrase, or compile previous work by others.
c. The paper appropriately frames the original material in the project within the context of established work or relevant traditions in the discipline, provides documentation (e.g., bibliographic citations, tables and figures, illustrations) appropriate to the discipline, contains few and relatively minor grammatical or typographical flaws, is clear, well organized, and stylistically sound.
d. The work itself is of very high quality. The project has been carried out competently, diligently, independently, and in a manner that fulfills the basic standards of the discipline.
e. The oral examination reaffirms the high quality of the work, the originality of the contribution, and the student's facility with relevant principles, concepts, and background material.

Magna Cum Laude - Honors with great distinction

In addition to fulfilling the criteria described above, the project must fulfill all of the following criteria:

a. Each of the three components of the project (the work, the written exposition, and the oral examination) demonstrates a level of mastery of, and facility with, relevant previous work, underlying principles, and central concepts or theories of which few undergraduates are capable, as well as a solid grasp of related but peripheral material.

b. The thesis, interpretation, analysis, synthesis, pedagogical exposition, or creative endeavor encompassed by the project demonstrates unusual and substantial creativity, conceptual innovation, or theoretical sophistication (i.e., an unusual degree of independence of thought) on the part of the student.
c. The framing of the original material in the project within the context of established work or relevant traditions is remarkably sophisticated, revealing a sensitive and advanced understanding of the relationship between the student's contribution and established traditions or theories. The paper contains almost no grammatical or typographical flaws and is particularly well written, lucid, and compelling.
d. The work itself is of outstanding quality. The project has been carried out with a degree of technical competence, diligence, and independence of which few undergraduates are capable.
e. The oral examination reaffirms the outstanding quality of the work. The student is able to give complete, clear, well organized, and satisfying responses to the examiners' questions without the need for much guidance or prompting from the examiners.

Summa Cum Laude - Honors with highest distinction

This level of honors is rarely achieved and is reserved for those instances in which all three components of the project (the work, the paper, and the oral examination) demonstrate a superlative level of excellence. In addition to fulfilling the criteria described above, the project must fulfill all of the following criteria:

a. Each of the components of the project (the work, the written exposition, and the oral examination) not only demonstrates an exceptional level of mastery of, and facility with, relevant previous work, underlying principles, and central concepts or theories but also a sophisticated and original critical perspective on this material (i.e., the student possesses informed opinions about the strengths and weaknesses of previous work, theories, and traditions in the area). The student not only intimately understands relevant background material but also has the ability to view this material critically in a wider intellectual context.
b. The thesis, interpretation, analysis, synthesis, pedagogical exposition, or creative endeavor encompassed by the project demonstrates a superlative level of creativity, conceptual innovation, or theoretical sophistication on the part of the student.
c. The framing of the original material in the project within the context of established work or relevant traditions is elegant and subtle, revealing a rare and exceedingly advanced understanding of how the student's project represents a significant contribution to established traditions or theories. The paper is not only technically flawless (or virtually flawless) but is exceedingly well written, compelling, and engaging.
d. The work itself exceeds all expectations. The project has been carried out with a superlative level of technical competence, sophistication, diligence, and independence.
e. The oral examination reaffirms that the work is a rare achievement that makes an original and sophisticated contribution. The student is able to give extraordinarily complete and persuasive responses to the examiners' questions without the need for guidance or prompting from the examiners.

Student-Initiated Courses and Programs

Special instructions for projects in the arts
The above criteria are used in evaluating all Honors in Independent Study projects with the exception of the brief paper written for a project in the arts. While the paper for a project in the arts must be clearly organized and well written, contain appropriate documentation when needed, and display a high quality of thought and presentation, it is considered to be supplementary to the work itself. In the arts, the criteria listed above should be used primarily to evaluate the project itself and the subsequent oral examination.

Writing For Credit
Students may write for credit (with permission of the instructor) in any course in the curriculum except tutorials, independent study, or Freshman Studies. They should consult the instructor for permission to write for credit; the instructor will then specify a program and schedule of reading, examinations, and papers.

To register, a student must supply the registrar with a memorandum containing the name of the course and the signatures of the student's advisor and the instructor of the course. The work must be completed in one year. Courses do not become part of a student's record until the instructor reports that the required work has been satisfactorily completed. The letter grade will be recorded for the term in which the grade is reported.

Students who have opted for billing by the course under the incremental fee plan will be charged for the credit earned by writing for credit and reported that term.

Student-Designed Courses
Students may design and execute their own courses in areas and subjects not normally part of the Lawrence curriculum but appropriate to a liberal arts education. A student-designed course should address a topic or topics in which students proposing the course have experience or expertise. The course may pursue, in depth, some topic that grows out of an existing course. It may link the perspectives of two or more disciplines in the solution of some problem. Or, it may satisfy students' intellectual interests in other ways.

Students must have attained at least sophomore standing to participate in a student-designed course. To initiate a course, at least three students submit a prospectus containing statements on the subject matter, format, reading list, and formal requirements (papers, reports, exams, etc.) to a faculty member who will either enroll in the course as an informal member or agree to act as an advisor for the course. Upon the faculty member's approval, the prospectus is submitted to the Curriculum Committee for its review and decision by the third week of the term prior to the term in which the course is to be offered.

The committee encourages early applications so that the sponsoring students will have an opportunity to adjust their proposal to any of the concerns and criticisms voiced by the committee upon its preliminary review. Grades are assigned by the participating faculty member or faculty advisor on a Satisfactory/ Unsatisfactory basis.

Student-Initiated Courses and Programs

In reviewing applications, the Curriculum Committee pays particular attention to:

1. evidence of competence and expertise in the students or the faculty advisor sufficient to assure adequate guidance and leadership in the course,
2. evidence of careful forethought and planning of a course of study that can be realistically accomplished within a ten-week period, and
3. evidence that the course fits appropriately within a liberal arts education.

Completed applications must be submitted to the provost and dean of the faculty, who chairs the Curriculum Committee. Interested students may contact the provost and dean of the faculty or dean of student academic services for information and guidance.

Student-Designed Majors
Student-designed majors provide an opportunity for students to develop areas of concentration outside established programs for interdisciplinary or departmental majors. Like all majors, those that are student-designed should meet the following objectives: greater knowledge of the field under study; increased methodological sophistication; and the integration of sometimes disparate, but related, areas of study that fall within the proposed major. Student-designed majors must be based on areas of faculty expertise and regularly offered courses. The major should not be heavily reliant on tutorials, independent studies or a single faculty member.

The procedure for establishing a student-designed major is as follows:

1. The student elects a general topical area and identifies a member of the faculty who is willing to act as advisor.
2. With the advisor, the student develops a statement on the planned major. The statement indicates (a) how the major will serve the objectives of an area of concentration; (b) what educational or other objectives the student seeks to meet; and (c) the courses that have been taken or will be taken that would fit into the major and the proposed *Senior Experience*. In the statement, the student and the advisor have the responsibility to show that the proposed objectives can best be satisfied outside established programs of study. (d) Proposed coursework should include a reasonable distribution across the introductory, intermediate and advanced levels. As a guideline, regular majors for the Bachelor of Arts degree typically require nine to twelve courses and a *Senior Experience*. (e) Self-designed majors should not be proposed in areas that are better served by existing majors and minors.
3. The advisor and the student invite two other members of the faculty who are supportive of the proposed major to serve as the student's advisory panel for the major. The panel is responsible for overseeing the program and for reviewing minor changes — e.g., in course selections, topics for an honors paper, etc. One member of the panel should be designated as an alternate advisor in case the principal advisor goes on leave or teaches at an overseas campus that the student does not attend. It is the student's responsibility to check with department chairs whether proposed courses in the major will be offered in the terms indicated.

   If the *Senior Experience* will be done as an independent study, the student also needs the signed commitment of a faculty member for that independent study.

4. The student submits the statement of the proposed major, endorsed by the faculty advisor and members of the panel, and a transcript to the Committee on Instruction (for the Bachelor of Arts degree) or the Conservatory Committee on Administration (for the Bachelor of Music degree) before the end of Term I of the student's junior year. Students wishing an extension to this deadline should contact the chair of the relative committee. Faculty members who endorse the statement accept responsibility for supervising the major if it receives committee approval.
5. The Committee on Instruction takes action on the proposed major and communicates its action to the registrar, the student, the faculty advisor, and members of the panel.

Application forms for student-designed majors may be obtained from the Committee on Instruction webpage (www.lawrence.edu/oncampus/committee/instruction).

Learning Experiences Outside the Classroom

Björklunden

Lawrence University's northern seminar center, Björklunden vid Sjön, is located in Door County, Wisconsin, on the eastern side of the peninsula that forms the Bay of Green Bay. Björklunden (pronounced Bee-york´-lun-den), whose name means Birch Forest by the Water, is a 425-acre estate graced by woods, meadows, and more than a mile of unspoiled Lake Michigan shoreline.

Winifred and Donald Boynton bequeathed the property to Lawrence in 1963 with the understanding that it would be preserved in a way that would ensure its legacy as a place of serenity and contemplation.

The Boyntons' summer residence became Björklunden's main lodge. A fire in 1993 destroyed the original structure, but it was replaced by a new year-round seminar and conference center in 1996.

Following a major expansion in 2007, the 37,000-square-foot lodge now contains multi-purpose and seminar rooms, a dining room, and a kitchen, as well as 22 additional guest rooms. There are two lakeside decks, a top-story observation deck, an elevator, music practice rooms, and a computer lab. The entire facility has wireless Internet access.

In addition to the main building, the Björklunden estate also includes a small wooden chapel built in late 12th-century Norwegian stavkirke style, handcrafted by the Boyntons between 1939 and 1947 and modeled after the Garmo stave church at Maihaugen in Lillehammer, Norway.

Weekend student seminars

Throughout the academic year, groups of Lawrence students and faculty members travel to Björklunden for weekend seminars and retreats. Student seminars provide the opportunity to explore exciting themes and issues, along with the time and the environment in which to embrace ideas and their consequences.

The power of a Björklunden weekend lies in the connection between thought and reflection. Making that connection fulfills one ideal of a liberal education.

Björklunden weekends are distinctive and highly memorable integrative experiences. Seminar topics are wide-ranging, and students have the opportunity for intensive inquiry and discussion with faculty members and among themselves in an informal, intimate setting.

In creating and developing the seminars at Björklunden, Lawrence seeks to provide a different kind of educational experience, one in which participants are encouraged to leave old assumptions behind and the barriers of class, rank, and status are removed in order for students and faculty members to learn meaningfully from each other.

Lawrence invites each student to experience Björklunden and be changed. That is a powerful expectation, but those who have been to a seminar at Björklunden will testify to its fulfillment. As a place of refuge and peace, where spiritual values and aesthetic sensibilities can be explored, Björklunden provides a unique setting for personal growth.

Learning Experiences Outside the Classroom

The following are representative of the variety of topics and organizations that schedule Björklunden weekends:

- Gender studies
- Linguistics
- Economics
- Government
- Student teachers
- French
- Theatre arts
- Spanish
- Philosophy Club
- Psychology Student Association
- Swimming and Diving team
- Magic Club
- Viking Conservatives
- College Democrats
- Improvisation troupe
- Amnesty International
- Fencing team
- The Lawrentian student newspaper
- Habitat for Humanity

Convocations
All-college convocations are scheduled each year, beginning with the Matriculation Convocation, at which the president speaks, and ending with an Honors Convocation at which the academic and extracurricular achievements of students are given special recognition.

The faculty Committee on Public Occasions invites individuals of high accomplishment and profound insight to address members of the college and Fox Valley communities on topics of broad interest.

Convocation visitors have included authors John Updike, Gwendolyn Brooks, Frank McCourt, Maya Angelou, Joyce Carol Oates, Edward Hirsch, Isabel Allende, N. Scott Momaday, and Salman Rushdie; journalists David Halberstam, Richard Rodriguez, Fareed Zakaria, Susan Faludi, and Juliette Kayyem; public intellectuals Henry Louis
Gates Jr. and Cornel West; historians Arthur Schlesinger, Michael Beschloss, James McPherson, and William Cronon; activists Harry Wu, Fay Wattleson, Lech Walesa, and Joia Mukherjee; public officials Richard Holbrooke, George Mitchell, and John Lewis; and scientists Robert Sopolsky, Lisa Randall, Brian Greene, Steven Pinker, and Robert Ballard.

Convocations are held on Tuesdays or Thursdays at the 11:10 a.m. hour, which is reserved for that purpose.
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Learning Experiences Outside the Classroom

Lecture series
Throughout the academic year, Lawrence offers a wide variety of lectures, symposia, and colloquia.

The Main Hall Forum series sponsors a wide range of lectures by Lawrence faculty and distinguished academic guests speaking on historical and contemporary issues and presenting recent scholarship in the humanities and social sciences.

The Science Hall Colloquium is a series of cross-disciplinary lectures that address research developments in diverse areas of the natural and physical sciences.

The Recent Advances in Biology lecture series, sponsored by the biology department, addresses issues and advances in biological research. Talks by Lawrence faculty members and scientists from other universities and organizations expose students to the latest discoveries in a wide range of biological disciplines.

The Fine Arts Colloquium presents lectures that touch on topics related to art, art history, and theatre.

Over the years, gifts from alumni and other friends of Lawrence have made funds available to support events of special interest, such as the Mojmir Povolny Lectureship in International Studies, which promotes discussion on issues of moral significance and ethical dimension; the Marguerite Schumann ’44 Memorial Lectureship, which sponsors speakers on topics that were of special interest to Ms. Schumann, such as history, music, and writing; the Mia T. Paul, ’95, Poetry Fund Lectures; the William Chaney Lectureship in the Humanities; the Edward F. Mielke Lecture Series in Biomedical Ethics; and the Spoerl Lectureship in Science in Society.

Visiting artists
Each year, musicians of international stature visit Lawrence to appear in public concert or recital and to conduct master classes for conservatory students.

Musical visitors have included Emanuel Ax, piano; Joshua Bell, violin; the Czech Nonet Chamber Ensemble; Charlie Haden, jazz bass; Marilyn Horne, mezzo-soprano; The King’s Singers; Susan Graham, vocalist; Yo-Yo Ma, cello; Wynton Marsalis, jazz trumpet; Jon Hendricks, jazz vocalist; John Scofield, jazz guitarist; Benny Golson, saxophone; Maria Schneider, jazz composer and conductor; and Pinchas Zuckerman, violin, viola, and conductor.

Gallery talks and experts’ lectures are an integral part of art exhibitions presented in the Wriston Art Center Galleries. In 2006-07 exhibitions in the three galleries of the art center included the sculpture of Kristin Gudjonsdottir, the paintings of Jiwon Son, the photography of Julie Anand, works in a variety of genres and styles from the Lawrence Permanent Art Collection, and the annual spring show by senior art majors.

Guest directors, designers, and theatrical technicians are often brought to campus to assist in productions of the Department of Theatre Arts and the Opera Theatre, teaching by example the fine points of theatrical technique.

Learning Experiences Outside the Classroom

A five-member theatre troupe called Actors from the London Stage has made one-week visits to Lawrence for nearly 20 years to perform for campus audiences and to work with students, delivering lectures and staging workshops ranging from music education to advanced acting techniques. Each section of the Freshman Studies course has a special session of readings and exercises with one of the actors.

The director of the Milwaukee-based Wildspace Dance Company serves as an artist in residence and teaches courses in the theatre arts department on Movement for Theatre, and the ensemble offers an annual performance on campus.

The Stephen Edward Scarff Memorial Visiting Professorship
The Scarff professorial chair, a visiting appointment, allows the college to bring to campus distinguished public servants, professional leaders, and scholars to provide broad perspectives on the central issues of the day. Scarff professors teach courses, offer public lectures, and collaborate with students and faculty members in research and scholarship.

Mr. and Mrs. Edward L. Scarff created the professorship in 1989, in memory of their son, Stephen, a 1975 Lawrence graduate. Scarff visiting professors have included William Sloane Coffin, Jr., civil rights and peace activist; David Swartz, first U.S. ambassador to the Republic of Belarus in the former Soviet Union; G. Jonathan Greenwald, former United States minister-counselor to the European Union; Takakazu Kuriyama, former Japanese ambassador to the United States; Charles Ahlgren, a 30-year veteran of the U.S. Foreign Service with a specialty in economic affairs; George Meyer, former secretary of the Wisconsin Department of Natural Resources; and Robert Suettinger, an intelligence analyst and China policy expert.

Internships
Internships are carefully supervised learning experiences in a work or service setting. Different than short-term jobs or volunteer experiences, internships are deliberately designed by the intern in order to explore his or her career area of interest. Interns bring a carefully considered learning agenda with intentional learning objectives to the internship and reflect actively on their experience. Internships can be taken for credit or not, and they can be paid or unpaid.

Recent internship projects have involved writing business plans for a growing non-profit organization in the Fox Valley, rehabilitating songbirds and raptors native to Wisconsin, learning the ropes of an innovative musical theatre in downtown Chicago, and counseling immigrants at the Irish Immigration Center in Boston.

Other internship sites have included Wall Street financial-service firms, domestic violence shelters, marine biology research laboratories, the Wisconsin State Historical Society, the United States Senate, the Newberry Library, the Argonne National Laboratory, and the Smithsonian Institution, among many others.

To assist students in their search for an internship, the Career Center maintains an active database of internship listings, books of national internship listings, and directories for locating potential internship sites. Career Center staff members are also available to assist students in identifying potential occupations they would like to explore in an internship.

For a detailed description of academic internships, please click here.

Learning Experiences Outside the Classroom

ArtsBridge America
ArtsBridge America, a program founded at the University of California, Irvine, in 1996, works with K-12 schools throughout the nation to return the arts to public education. ArtsBridge programs create university and K-12 school collaborations by partnering university arts students (ArtsBridge scholars) with K-12 teachers to introduce interdisciplinary arts instruction through ArtsBridge projects.

Over the course of a semester, Lawrence ArtsBridge scholars spend 2-3 hours a week in the classroom integrating art, dance, digital art, music, and theatre to create unique lessons in the arts linked to individual classroom curricular needs. Under the guidance of a Lawrence University faculty mentor, the scholar works collaboratively with the host teacher to integrate arts instruction with the core curriculum, so that the arts reinforce lessons in social studies, math, language and communication arts, or science.

Off-Campus Programs

Off-campus study provides a valuable opportunity to hone and extend the intellectual skills and capacity for civic and academic engagement associated with a Lawrence liberal arts education by placing students in educational settings that purposefully combine classroom and experiential learning. In such settings, students are challenged to apply and question what has been learned on the home campus and to evaluate alternate perspectives and ways of learning.

Off-campus study also provides a rich opportunity for personal growth as students gain independence and self-confidence through active engagement with social and cultural practices different than their own and/or through the experience of educational or research settings whose pedagogical approaches and curricular structures differ from those at Lawrence.

Students who wish to study off-campus are encouraged to make an appointment with the Financial Aid office to discuss their financial expectations. Program costs vary widely and it is best to be prepared for the financial reality of your off-campus study decisions.

Campus visits in the fall and winter terms by representatives from the affiliated programs, as well as individual discussions with the program faculty and staff, provide an excellent opportunity to learn more. Please also consult your academic advisor, other faculty, students who have studied off-campus in the past, and the Off-Campus Programs Coordinator to gather as much information about the program(s) as possible.

Policies and Procedures for Off-Campus Study

Participation on an off-campus program requires approval by the Lawrence Subcommittee on Off-Campus Study and, in the case of affiliated programs, acceptance by the program sponsor. Students must apply using the Lawrence Off-Campus Study Proposal. Each year, the proposal deadline for most affiliated programs for the upcoming summer and following academic year is in early February (a few programs have earlier application deadlines). Applications for the London Centre and the Francophone Seminar in Dakar Senegal are due early in Spring term.

Lawrence approval is granted only if the student is adequately prepared both personally and academically for the program and if the program coherently fits the goals of a Lawrence liberal arts education and the individual student's academic plan. The specific evaluation criteria are listed below.

Lawrence's policy is to support one off-campus study program for those students who elect to study off-campus. The only exceptions to this policy involve the London Centre, the Francophone Seminar, and the Marine Biology Term, each of which may be combined with study on a second program. Students may also elect to participate on a non-affiliated off-campus program and seek transfer credit for that experience (however, Lawrence scholarships, grants, and loans may not be applied to the program costs associated with those programs).

Evaluation & eligibility criteria for participation on an off-campus program

Following are the criteria used to determine student eligibility to participate on an off-campus study program and used by the Subcommittee on Off-Campus Study in evaluating applications for such programs.

1. The student meets all Lawrence eligibility requirements for off-campus study. A student is ineligible for off-campus study in the following cases:
    - if she or he will not achieve sophomore status prior to participation on the off-campus program;
    - if she or he is on academic probation in the term preceding off-campus study or will not be in good academic standing at the time of participating in off-campus study;
    - if she or he is on disciplinary probation in the term preceding off-campus study or will not be in good disciplinary standing at the time of participating in off-campus study; and/or
    - if she or he has a demonstrated history of behavioral issues inappropriate for off-campus study.
2. The proposed program represents a well-defined continuation of the curricular and pedagogical goals of a Lawrence liberal arts education and the individual student's academic plan. This may include, but is not limited to:
    - opportunities to apply, extend, and/or develop specific academic or intellectual skills in a different educational, cultural, or linguistic context;
    - opportunities to pursue specific independent research; and/or
    - opportunities to apply, extend, and/or develop other kinds of on-campus learning in a different academic, cultural, or linguistic context.
3. The student's record shows evidence of college-level preparation and academic achievement appropriate to the proposed program.
4. In situations where Lawrence limits participation, qualified students proposing their first off-campus program will be given priority over qualified students proposing participation on an additional program.

Off-campus study approval wait lists

In order to budget effectively for the institutional costs associated with off-campus study, Lawrence establishes an annual cap on the number of students who may participate on affiliated programs. If there are more suitable applicants than the annual cap allows the Subcommittee to support, a waiting list will be created based upon a combination of seniority and other relevant academic and application factors.

Program capacity for Lawrence sponsored programs (the London Centre, in particular) is limited. In the case of the London Centre, if there are more suitable applicants than there are available spaces for a given term, some students will be shifted to their second-choice term based upon relevant factors. In situations where such accommodations cannot be made, a waiting list ranked according to the same criteria as above will be maintained for each over-subscribed term.

Financial aid and off-campus study

In an effort to promote off-campus study, financial assistance is available to students who wish to participate in one of Lawrence's affiliated or sponsored off-campus programs and who have demonstrated financial need. Merit scholarships, music scholarships, and tuition exchange benefits will not be applied to off-campus study programs, but need-based grants and loans are applicable to all Lawrence-sponsored and Lawrence-affiliated programs. In 2010-11, the maximum Lawrence grant that may be applied is $5,600 for any one-semester or one-term program and $11,200 for any one-year program. Typically, all government sponsored grants (e.g., Federal Pell Grants, Federal SEOG, and Wisconsin Tuition Grants) are fully applicable to

all such programs. Per program policies, students receiving Lawrence Tuition Remission or ACM Tuition Remission will be allowed to apply their tuition benefit toward the cost of Lawrence-sponsored programs. These programs include the London Centre, Kurgan Exchange, and Francophone Seminar in Dakar, Senegal. These benefits are not applicable to Lawrence-affiliated programs.

The cost for many off-campus study programs is greater than the cost of studying for the same period of time at Lawrence. Students should make certain they consider out-of-pocket expenses when deciding whether or not they can afford a given program. Comprehensive cost estimates for all Lawrence affiliated and sponsored programs are available from the financial aid office. Some programs (e.g. IES and ISA programs) offer the opportunity to apply for additional scholarship funds.

Any student who will need financial assistance to be able to afford an off-campus study program is encouraged to submit the Free Application for Federal Student Aid (FAFSA) as early as possible during the year preceding their proposed program. Even those not qualifying for need-based aid may wish to absorb the incremental expense through either an unsubsidized Stafford Student Loan or a parental PLUS loan and are thus encouraged to submit the FAFSA.

Students are encouraged to pursue outside scholarship opportunities to assist with the incremental cost of off-campus programs. See the Off-Campus Study Funding page for more information about scholarships and funding options for off-campus study.

Billing & deposits
Lawrence bills program tuition and billable program fees for students participating in LU sponsored and affiliated programs. In the case of affiliated programs, Lawrence charges only the direct costs billed by the program sponsor plus a nominal administrative fee of $250. In the case of Lawrence-sponsored programs, students are charged Lawrence tuition and a program fee to cover fixed in-country costs.

Many programs require a confirmation deposit from students to officially accept their offer of admission. For affiliated programs, students should pay this deposit directly to the program provider. Students accepted to a Lawrence sponsored program will receive more information about this confirmation deposit upon acceptance. The deposit for an affiliated or sponsored program cannot be billed to a student's Lawrence student account.

Mandatory health insurance coverage
Every student participating on a Lawrence-sponsored or -affiliated international off-campus program is required to carry the Lawrence University international medical and evacuation insurance policy administered by Cultural Insurance Services International. The fee for this coverage (approximately $40 per month of coverage) is charged to the student’s Lawrence account along with the program fees.

It is presumed that this coverage is in addition to whatever medical insurance coverage the student already holds and has thus been factored into the comprehensive cost estimates for the international off-campus study programs.

The insurance coverage starts three days before the program start date and extends one week beyond the program end date, to allow time for travel to and from the program. As this coverage is valid only outside the United States, all students are strongly encouraged to maintain their

health insurance coverage in the United States in the event of their unexpected return due to a medical emergency.

More information about the coverage through CISI is available here. You will find the Lawrence policy brochure and claim form, how to purchase additional insurance for a period of personal travel, CISI and Assistance Company contact information, and related links.

Health advisories, travel advisories, and travel warnings
Lawrence strongly recommends that all students avail themselves of the travel information available from the U.S. State Department, Centers for Disease Control (CDC), and World Health Organization (WHO) websites. In particular, students should carefully consider the information included in State Department travel advisories and alerts for the country in which they are pursuing off-campus study and/or for any other country to which they are planning to travel during their time abroad. Please note the difference between State Department Travel Warnings and Travel Alerts.

Lawrence will cancel a Lawrence-sponsored program or will withdraw its approval for study on a Lawrence-affiliated program if a State Department Travel Warning and/or a CDC or WHO travel advisory is in place for the host country. Lawrence does not support students participating on off-campus study programs in countries with these levels of caution. Withdrawal of approval for an affiliated program bars a student from receiving Lawrence credit for the program and from applying institutional financial aid to the program costs.

In order to make certain that a student may make an informed decision regarding participation on a program, the issue of potential loss of Lawrence approval for an affiliated program will be brought to the student’s attention as far in advance of the program start date as it is feasible. This policy applies to students attending programs where such a warning or alert is in place before the program begins (even if there may not have been such a warning or alert for the host country when the student applied and/or was accepted to the program).

Housing
For information about how off-campus study effects a student's on-campus housing selection please click here.

Lawrence-Sponsored Programs

Lawrence London Centre

The Lawrence London Centre was established in 1970 to introduce Lawrence students to the rich social, cultural, and political history of the British people through a program of classroom study supplemented by field trips, museum visits, guest lectures and performances, cultural opportunities, and travel. While continuing to play this important role in a Lawrence liberal arts education, the London Centre also seeks to utilize its setting in a cosmopolitan world city as a rich text wherein Lawrence students can engage the significant political, economic, cultural, and intellectual challenges of the 21st century. London is known to the world as a cosmopolitan center of artistic, financial, and academic activity which makes it a great location for a variety of academic and cultural explorations. London Centre courses cover a range of areas including theatre, music history, anthropology, history, government, and art history. Course offerings vary each term. All students take part in a 3-unit core course called British Life and Culture. London Centre courses do not have prerequisites and are open to all London Centre participants. Many

courses can be used to fulfill general education requirements. Internships are also available to juniors and seniors through an additional selection process. Music students are able to arrange 3-unit S/U music lessons for credit.

For more information:
www.lawrence.edu/academics/offcampus/london/

Lawrence Francophone Seminar

This biennial program in Dakar, Senegal, introduces students to Western African culture. Organized by the Lawrence French department in conjunction with the Baobab Center, participants, accompanied by a Lawrence professor, study the French and Wolof languages, Senegalese history and culture, and Francophone African literature and may arrange individual music lessons. The academic program is supplemented by local excursions, a stay in a rural village, and field trips to other parts of the country and region.

Prerequisites:
Two years of college level French study is required or the equivalent (completion of French 202). The course Destination Dakar is required in the term preceding the seminar term.

For more information:
www.lawrence.edu/academics/offcampus/francophone/

Lawrence Kurgan Exchange Program

Kurgan, Russia is located on the steppes of Siberia and has been Appleton, Wisconsin's sister city since 1989. Through a bilateral exchange agreement, Lawrence students may study for one semester at Kurgan State University. Students pursue courses in Russian grammar and phonetics, conversation, and literature. Students are placed with host families connected with the sister city program. For more information about this exchange, please contact the Off-Campus Programs office or the Russian department. *This program is only offered in Fall semester.*

Prerequisites:
Previous Russian study is required.

Off-Campus Programs

2010-11 London Centre Courses

ANTH 372
Urban Anthropology of London
6 units, Fall and Spring Terms

This seminar combines a variety of methods to explore contemporary British culture. In addition to the readings and field trips, students conduct ethnographic fieldwork in London on a topic of their own interest. This may be based in a particular place or, more broadly, focus on a certain group of people. The course provides an introduction to field research methods. Throughout the term, students participate in shorter exercises designed to develop their confidence in the skills of observation, interviewing, description, and analysis. Readings on topics such as neighborhoods, social use of language, class, education, and migration experience provide a framework for understanding the detail of the individual projects. Students are expected to make presentations and participate in discussions. This course fulfills a social sciences distribution requirement and dimensions of diversity requirement.

ARHI 246
19th-Century Art, Design, and Society in Britain
6 units, Fall and Spring Terms

In the 19th century, Britain was at the height of her imperial and industrial powers, with a burgeoning middle class with increased spending power. Against this background, this course examines the painting (including Turner, Constable, the Pre-Raphaelites, the High Victorians), architecture, furniture, and interiors of the period, utilizing the wealth of examples in London's museums, galleries, and buildings. This course fulfills a fine arts distribution requirement.

CMSC 165
WWII Codebreaking
6 units, Fall Term

A historically-situated lesson in an early application of computer science: the successful Allied codebreaking effort of the second World War. General principles of computer science will complement specific algorithms for encrypting and decrypting secret messages to enable students to understand the remarkable accomplishments of Alan Turing and the London-based British and American codebreaking teams.

ENG 170
Shakespeare in London
6 units, Spring Term
Students will study several plays by William Shakespeare selected from among the current offerings by the Royal Shakespeare and other companies. Discussions will address the plays themselves, production techniques, and the audiences to whom they appeal. Students are required to attend performances of the plays under study.
Also listed as THAR 170

GOVT 385
Modern British Politics
6 units, Winter Term

This course analyzes the central structures and processes of British politics, the important policy issues of recent years, British attitudes toward the political system, and critiques of British politics and history.

HIST 150
Stuart England, 1603-1715
6 units, Spring Term

This course explores the causes and impact of the English Civil War, the effect of the Restoration, the Glorious Revolution, and the path to the Hanoverian Succession. The economics, politics, religion, social history, and cultural aspects of the period are also studied. Visits to museums and buildings of the period are included.

HIST 247
The Impact of Empire on Great Britain, 1814-1914
6 units, Winter Term

In 1914 the British empire contained a population of over 400 million people and was territorially the largest empire in world history. While the British spread their ideas about government, language, religion, and culture to their colonies, Britain itself was also profoundly influenced by the colonies it ruled. This course will explore aspects of the impact of the Empire on British politics, economics, society and popular culture during the 19th century.

Among the topics to be covered are the anti-slavery movement, imperialism and new imperialism, jingoism and popular culture, economic responses and the influence of imperialism on culture and the arts. The myriad resources of London will be used to provide specific examples of how important the Empire was in shaping
British identity and institutions during the 19th century.

MUHI 135
British Musical Renaissance
6 units, Winter Term

An introduction to British music in the first three-quarters of the 20th century. In addition to studying major works by Elgar, Vaughan Williams, and Britten, students will explore the social and political currents as they impinged on musical life in Britain. A number of concerts and outside visits will be organized, and students will be encouraged to attend relevant performances in London, for which they will be prepared in class. The course will be general in scope, and no prior musical knowledge will be expected. Does not satisfy course requirements for any music major. Not open to students who have previously received, or need to receive credit for MUHI 435

MUHI 435
British Musical Renaissance: Elgar, Vaughn Williams and Britten
6 units, Winter Term

An introduction to British music in the first three-quarters of the 20th century. In addition to studying major works by Elgar, Vaughan Williams, and Britten, students will explore the social and political currents as they impinged on musical life in Britain. A number of concerts and outside visits will be organized, and students will be encouraged to attend relevant performances in London, for which they will be prepared in class. This course is a seminar involving independent research. Not open to students who have previously received credit for MUHI 135.

MUIN 355
London Studio Instruction
Fall, Spring and Winter Terms

Individual instruction in music at the London Centre

THAR 111
Introduction to the Theatre
6 units, Fall Term

A survey of the traditions of dramatic form and the contributing arts of the theatre presented in historical context. Students read representative playscripts and attend performances

THAR 170
Shakespeare in London
6 units, Spring Term

Students will study several plays by William Shakespeare selected from among the current offerings by the Royal Shakespeare and other companies. Discussions will address the plays themselves, production techniques, and the audiences to whom they appeal. Students are required to attend performances of the plays under study.
Also listed as ENG 170

THAR 279
Fringe Theatre in London
6 units, Winter Term

This course will attempt to define Fringe Theatre (a movement started in 1968) and to categorize its main elements. The class shall attend a wide variety of plays and venues and come to an understanding of how the fringe has changed over the years. Discussions will address production techniques, the plays themselves, the audiences to whom they appeal, and to what extent the fringe is still an important theatrical force. Students are required to attend performances of the plays under study.

Off-Campus Programs

UNIC 203
British Crime Fiction
6 units, Winter Term

The course will offer a survey of the development of crime fiction in Britain from the mid-nineteenth century to the pre sent. Taught as a lecture/discussion class, it will also attempt to exploit the London setting to provide a physical context for some of the work under scrutiny. Students will be able to develop their analytical and writing skills, and should expect to achieve a good grasp of the characteristics of genre fiction; they should also be able to recognize the contribution that a study of these popular forms can make to developing a broader understanding of the values and concerns of the society within which they arise.

UNIC 260
British Life and Culture
3 units, Fall, Winter and Spring Terms

This compulsory course utilizes visiting speakers, site visits, small group fieldwork and short research projects to introduce students to contemporary life in London and the United Kingdom. Site visits usually include the Museum of London, Imperial War Museum, London Mosque, and a football match. Speakers have included religious leaders representing several different traditions and a homeless couple, among others. The course is designed so that the majority of work takes place during the single class meeting, allowing students the possibility of pursuing up to three elective courses.

UNIC 264
London Internship
6 units, Fall, Winter and Spring Terms

Students in the internship program participate in this seminar meeting once per week and building upon the field study, lectures, and discussions in the British Life and Culture course. Students are expected to maintain a journal with substantial entries each week that critically reflect on their experiences from intercultural, cross-cultural, social, ethical, organizational, and interpersonal perspectives. Students are also required to complete short reflective essays and a final internship essay interrogating their experiences in terms of the course readings, class discussions in the seminar and the British Life and Culture course, and the broader issue of how a liberal arts-informed perspective frames one’s experience in the workplace.

Off-Campus Programs

United States Programs

Chicago, Illinois • ACM Business, Entrepreneurship, and Society
The ACM Business, Entrepreneurship, and Society program provides an excellent opportunity for students to explore and study the interactions between a liberal arts education and the economic and social influences shaping the world of business today. Students engage with Chicago, a center for business and finance with a strong history of entrepreneurialism, through academic concepts introduced in a core course and thematic seminar. All students pursue a supervised internship and an independent study project.
Duration: Semester

This program is open to sophomores, juniors, or seniors. Students must be interested in the focus of the program but are not required to have a background with economics courses.

www.acm.edu/programs/12/business/

Chicago, Illinois • Chicago Arts
The ACM Chicago Arts Program is a semester of urban art immersion during which students explore the arts through practical, creative, and scholarly activity. Students meet and work with local artists and arts professionals through their supervised internships, independent study projects, the ACM Chicago programs' core course, and arts-focused seminars. In addition, students attend a wide range of cultural events during the semester.
Duration: Semester

www.acm.edu/programs/13/chicagoarts/index.html

Abbreviations: ACM, Associated Colleges of the Midwest; ACC, Associated Colleges in China; GLCA, Great Lakes Colleges Association; IES, Institute for the International Education of Students; ISA, International Studies Abroad

Chicago, Illinois • Newberry Library Seminar in the Humanities
Based at the world-renowned Newberry Library in Chicago, this ACM program provides a powerful introduction to the art of pursuing original research. Students in the program attend interdisciplinary seminars taught by visiting professors and work with resident scholars and library staff to research and write a major research paper based on the Newberry's broad collections in the humanities.
Duration: Semester

Juniors or seniors interested in pursuing serious research in the Humanities are eligible.

www.acm.edu/programs/14/newberry/index.html

Off-Campus Programs

Chicago, Illinois • TeachChicago Urban Teaching Program
Students seeking teacher certification can complete their student teaching practicum and seminar in the ethnically and culturally diverse urban Chicago environment. Placements are made in both public and private central-city Chicago schools. Students live in apartments located in Hyde Park, adjacent to the University of Chicago.
Duration: Semester

Interested students should talk with the education department about requirements for this program.

www.chicagocenter.org/student-programs/urban-student-teaching-practicum/

Chicago, Illinois • Urban Studies in Chicago
The ACM Urban Studies Program in Chicago seeks to develop in students the skills necessary for effective leadership in civic and political life by exposing them to the social and political forces that define urban life. Students engage the dynamics of a modern city through the lens of academic concepts introduced in a core course and thematic seminar. All students pursue a supervised internship and an independent study project.
Duration: Semester

www.acm.edu/programs/16/urbanstudies/index.html

Oak Ridge, Tennessee • Oak Ridge Science Semester
The ACM/GLCA Oak Ridge Science Semester enables advanced undergraduates to study and conduct research in the prestigious and challenging scientific environment of the Oak Ridge National Laboratory (ORNL) near Knoxville, Tennessee. The majority of a student's time is spent participating in a long-range research project with an advisor specializing in biology, chemistry, physics, computer science, or biochemistry. In addition, students participate in an interdisciplinary seminar and lecture series designed to broaden their exposure to developments in their major field and related disciplines.
Duration: Semester

The program is designed for seniors and highly qualified juniors with a minimum GPA of 3.0 and declared majors in related areas. www.acm.edu/programs/15/oakridge/index.html

Superior National Forest, Minnesota • Coe College Wilderness Field Station
The Coe College Wilderness Field Station is a four-week summer program of biological field study in the Superior National Forest in northern Minnesota. Classes are small and personal, with no more than eight students per instructor. All courses integrate lectures and laboratory investigation with daily canoe outings. Each class undertakes a lengthy canoe trip into Boundary Waters Canoe Area Wilderness.
Duration: Summer

www.public.coe.edu/fieldstation/

Off-Campus Programs

Woods Hole, Massachusetts • SEA Semester - Ocean Exploration program
The SEA program is designed to develop in students a talent for the application of scientific thinking and method to the marine environment. This program gives undergraduates the opportunity to study the ocean from a multitude of academic perspectives and to do it from the platform of a traditional sailing vessel. It is open to students in the sciences, humanities, and social sciences as well as to those who are "undecided." This is a unique opportunity for Lawrence students, scientists and non-scientists alike, to learn about our maritime heritage (in art, literature, philosophy, and politics) and to develop the observational and investigative skills that grow from sustained attention to complex physical data. The 12-week program is divided into the Shore Component (the first six weeks) and the Sea Component (the remaining six weeks). No sailing experience is necessary. Note: Lawrence is not affiliated with the specialized programs "Oceans and Climate" and "Documenting Change."
Duration: Term

www.sea.edu

Woods Hole, Massachusetts • Semester in Environmental Science
The Semester in Environmental Science is offered at the world-renowned Ecosystems Center of the Marine Biological Laboratory (MBL) in Woods Hole, Massachusetts. Students participate in two core seminars focusing on aquatic and terrestrial ecosystems. They also choose an elective seminar and pursue an independent research project under the guidance of the MBL staff and faculty.
Duration: Semester

http://ecosystems.mbl.edu/SES/

Washington, D.C. • Washington Semester
The Washington Semester enables students to participate in a thematic program of study at the American University in Washington, D.C. The Lawrence-approved program tracks are: American politics, economic policy, foreign policy, justice, and public law. In addition to the core seminar, students pursue an internship related to the program topic and an independent study project.
Duration: Semester

www.american.edu/washingtonsemester/

Off-Campus Programs

International Programs
Argentina

Buenos Aires Argentina
ISA Buenos Aires offers a broad curriculum that includes a focus on Argentine and Latin American studies. Students may select from courses designed specifically for foreign students and, in the case of students with advanced fluency in Spanish, from the regular course offerings at the University of Belgrano. In this latter case, classes are taught by Argentine faculty and classmates are regular Argentine university students. The Latin American Studies option, however, is intended for students with intermediate and advanced Spanish who have an interest in the political, social, economic, and cultural aspects of Argentina.
Duration: Summer, Year, Semester

Previous language study required.

www.studiesabroad.com/programs/country/argentina/city/buenos_aires

Australia

Macquarie University - Sydney Australia
This is an integrated program of study whereby Lawrence students participate in regular courses alongside Macquarie University's degree-seeking students. The university offers students in the social sciences (principally anthropology, environmental studies, gender studies, linguistics, and psychology), mathematics, and computer science access to broad curricular offerings that complement and extend Lawrence's offerings in Appleton. While courses are available in a variety of disciplines, students should only select courses that are applicable to the Lawrence curriculum.
Duration: Semester

www.international.mq.edu.au/studyabroad/prospectivestudents

Melbourne Australia
IES Melbourne offers students the opportunity for integrated study at the University of Melbourne. B.Mus. students may choose to pursue full-time music study with the prestigious Faculty of Music. Internship opportunities are available for qualified students with a broad variety of organizations. While courses are available in a variety of disciplines, students should only select courses that are applicable to the Lawrence curriculum. Note: Lawrence is not affiliated with the IES program at La Trobe University.
Duration: Summer, Year, Semester

Applicants should have sophomore, junior, or senior standing at the beginning of the program. Minimum GPA of 3.0. Exceptions may be made for juniors or seniors who have a GPA of 2.8 or higher. Students should consult the IES program website for additional application materials needed to apply for the exception to the GPA requirement.

www.iesabroad.org/IES/Programs/Australia/Melbourne/melbourne.html

Off-Campus Programs

Austria

Vienna Austria

IES Vienna offers a broad curriculum in the humanities and social sciences. Students may select from either English-taught or German-taught courses. Students with advanced German proficiency may also choose to pursue integrated study at the Universität Wien. Music students may choose to enroll in the Music Performance Workshop, combining individual music instruction with a German language course and three other courses selected from area studies, music history, and music theory offerings.
Duration: Year, Semester

No previous language study is required.

www.iesabroad.org/IES/Programs/Austria/Vienna/vienna.html

Botswana

Botswana

This ACM program offers students interested in African culture, politics, history, economics, ecology, and other areas the chance to participate in a unique program. The program is divided between courses in intensive Setswana language study, an elective course offered through the African Studies area of the University of Botswana, an elective course offered by ACM's Program Director, as well as completing an Independent Study project within their own area of interest.
Duration: Semester

www.acm.edu/programs/1/botswana/index.html

Canada

Québec Seminar & Internship

This program in French-speaking Chicoutimi, Canada, combines nine weeks of intensive coursework on French language and Québécois culture with four weeks of full-time internship in a business, governmental, or non-governmental organization. The program is organized through the Ecole de langue français et de culture Québécoise at the Université du Québec Chicoutimi. Students are housed with French-speaking families and participate in cultural and social activities organized by the Ecole. For more information about this exchange, please contact the Off-Campus Programs office or the French department.
Duration: Term

Two years of college level French study is required or the equivalent (completion of French 202)

http://lawrence.edu/academics/offcampus/catalog.php

Chile

Santiago Chile

IES Santiago offers an opportunity to pursue Spanish language study, Spanish-taught elective courses, integrated study at the Universidad de Chile or the Pontificia Universidad Católica, and internships. Students are placed in a home stay to facilitate language development and cultural immersion.
Duration: Year, Semester

Previous language study is required.

www.iesabroad.org/IES/Programs/Chile/Santiago/santiago.html

China

Associated Colleges in China

Based at the Capital University of Economics and Business in Beijing, the Associated Colleges in China Program combines intensive Chinese language study with lectures on Chinese society, art, literature, and history. The program includes a weekly language practicum, visits with host families, and field trips to culturally and historically significant locations.
Duration: Summer, Year, Semester

Previous language study is required.

www.hamilton.edu/academics/acc/

Costa Rica

Field Research in Costa Rica

The ACM field research program is designed primarily for advanced students wishing to pursue a significant field-based independent research project. This research may be in the humanities, social sciences, or sciences. Students prepare for their research during a month-long orientation that includes intensive language training and a review of fieldwork methodology. The research may be integrated with an ongoing project at Lawrence or started afresh on the program.

Duration: Semester

Students who will be juniors or seniors with prior coursework in the proposed research discipline are eligible. Familiarity with statistics, field work methodology, and research methods is recommended. At least two years of college Spanish (or the equivalent) is required

www.acm.edu/programs/4/fieldresearch/index.html

Costa Rica

Latin American Culture & Society in Costa Rica

This interdisciplinary ACM program is for students seeking to develop an understanding of life in Latin America. Language study is stressed as the key to understanding the culture. Coursework in language, literature, geography, anthropology, politics, and cultural change enables students to develop insights that are reinforced by field trips and two weeks of field work in rural areas. Students conduct an independent study project focusing on an aspect of Costa Rican culture of particular interest to them. Students live with host families.
Duration: Semester

Students who will be sophomores, juniors, or seniors are eligible. At least two years of college Spanish (or the equivalent) is required.

www.acm.edu/programs/3/slacs/index.html

Off-Campus Programs

Costa Rica

Sustainable Development Studies in Costa Rica

This program is offered at a field station in the community of Atenas, located along the Rio Grande River in the Central Valley. Students enroll in four courses, each of which include extensive field study and makes use of guest lecturers and opportunities to interact with the host community. The program provides environmental studies majors who wish to focus on policy issues with an opportunity to study the challenges that developing countries face as they attempt to increase prosperity while striving for levels of sustainable development that preserve natural resources.
Duration: Semester

Applicants must have completed at least 1 college-level course in ecology or environmental studies and one Spanish course. Previous coursework in international development, statistics, economics or anthropology is encouraged.

www.fieldstudies.org/pages/4250_costa_rica_semester.cfm

Ecuador

International Development in Ecuador

MSID seeks to engage students in an environment of reciprocal learning concerning local and global problems with a particular focus on development issues. This program allows anthropology, environmental studies, government, psychology, and other students interested in the theoretical and practical implications of international development and social justice to study firsthand the challenges faced by developing countries. Students gain hands-on experience by participating in a community-based internship. Students are placed in a home stay to facilitate language development and community integration.

Duration: Year, Semester

Applicants must have junior or senior status during the program and have taken at least 4 college-level Spanish courses.

www.umabroad.umn.edu/programs/AMERICAS/msidEcuador/

Quito Ecuador

IES Quito offers the opportunity for students to explore and study Spanish in an Andean location. Students in the Area Studies and Language track pursue Spanish language study, Spanish-taught IES elective courses, and have the option of integrating study at a local partner university. Students with advanced language skills can take part in the Direct Enrollment track where students take their full course load in the local university. Students may also pursue internships. Students are placed in a home stay to facilitate language development and cultural immersion.

Duration: Year, Semester

Previous language study is required. In order to gain admittance to the Direct Enrollment track of the program, students will need to have completed two to three classes beyond Spanish 202.
https://www.iesabroad.org/IES/Programs/Ecuador/Quito/quito.html

Off-Campus Programs

France

Nantes France

IES Nantes offers students the opportunity to combine French language study, French-taught area studies courses offered by the program, integrated study at l'Université de Nantes, and internship opportunities. Students are placed in a home stay to facilitate language development and cultural immersion.
Duration: Year, Semester

Previous language study is required.

www.iesabroad.org/IES/Programs/France/Nantes/nantes.html

Paris France - French Studies program

IES Paris offers students the opportunity to combine French language study, French-taught area studies courses offered by the program, internship opportunities, and integrated study at l'Université de Paris-Sorbonne, l'Université Paris VIII, or l'Institut Catholique. Music students may pursue performance and/or content study at the Ecole Normale de Musique de Paris/Alfred Cortot. Students are placed in a home stay to facilitate language development and cultural immersion. *Note: Lawrence is not affiliated with the "Business and International Affairs" program.*
Duration: Year, Semester

Previous language study is required.

www.iesabroad.org/IES/Programs/France/Paris/French_Studies_Program/parisFrenchStudies.html

Germany

Berlin Germany - Language & Area Studies program

IES Berlin offers advanced students the opportunity to combine German language study, German-taught area studies courses offered by the program, integrated study at the Humboldt Universität, and internship opportunities. *Note: Lawrence is not affiliated with the "Metropolitan Studies" program.*
Duration: Year, Semester

Previous language study is required.

www.iesabroad.org/IES/Programs/Germany/Berlin/Language/berlinLanguage.html

European Union

IES European Union offers students an opportunity to study the on-going development of the European Union (EU). In addition to a core seminar and a German language class, students pursue elective courses in one of three tracks: economics, political science or international relations. The program includes substantial field study, with trips to the European Parliament, Court of Justice, Commission and Council for the EU and the European Central Bank, among others. In addition, students participate in a weekend-long model EU simulation. Internship opportunities are also available.
Duration: Semester

No previous language study is required.

Off-Campus Programs

www.iesabroad.org/IES/Programs/EuropeanUnion/EuropeanUnion/europeanUnion.html

Freiburg Germany - Language & Area Studies program
IES Freiburg offers students the opportunity to combine German language study, German-taught area studies courses offered by the program, integrated study at the Albert-Ludwigs Universität, and internship opportunities. *Note: Lawrence is not affiliated with the "Freiburg Environmental Studies" program.*
Duration: Year, Semester

Previous language study is required.

www.iesabroad.org/IES/Programs/Germany/Freiburg/freiburgLanguage.html

Greece
College Year in Athens
The College Year in Athens offers courses in English focusing on Ancient Greece but also offers many classes on pre-historic, classical, post-classical, Byzantine, and modern Greece. In addition to offering courses useful to classics majors, the CYA curriculum includes offerings that would interest students of art history, archaeology, and Near East culture and history. All courses make full use of the resources available in Athens, with many of the classes conducted wholly or in part in museums or at historic sites. CYA regularly draws on the broad range of European and U.S. scholars pursuing research in Athens to offer lectures and colloquia at the CYA facility.
Duration: Summer, Year, Semester

www.cyathens.org/

Hungary
Budapest Semester in Mathematics
This program allows students in math and computer science to study mathematics with eminent Hungarian instructors in Budapest. Hungary has a long tradition of excellence in mathematics education. All classes are taught in English. Classes are small and are held on the College International campus of the Technical University Budapest near the city center.
Duration: Year, Semester

Applicants must have junior or senior standing and have an appropriate amount of math and/or computer science coursework completed by the beginning of the program.

www.stolaf.edu/depts/math-old/budapest/

India
India Studies
The ACM India Studies program offers students an excellent opportunity to observe the interaction of tradition and modernity that characterizes contemporary India. Students pursue Marathi language instruction, take four elective courses and complete an independent study project. Participants are placed in home stays, and the academic program is supplemented by field trips to nearby cultural sites. A variety of extracurricular activities, such as dance, yoga, and batik, can also be arranged.
Duration: Semester

Students who will be sophomores, juniors, or seniors during the program are eligible. No previous language study is required.

www.acm.edu/programs/5/india/index.html

Ireland

Gaiety School of Acting in Dublin

Study at the well-regarded Gaiety School of Acting provides a valuable opportunity for a theatre arts major to experience a semester focused on the craft of acting. The school provides conservatory-like professional training taught by local acting instructors. Students take courses in contemporary Irish drama, improvisation, acting, and voice and movement for the stage. Students also attend plays and take part in related field trips and cultural events.
Duration: Summer, Semester

Applicants must be theatre arts or English majors or minors, have junior or senior standing by the beginning of the program and have an appropriate amount of theatre arts coursework completed. Final admission decisions rest with the Gaiety School.

www.iesabroad.org/IES/Programs/Ireland/Dublin/Direct_Enrollment/DE_Universities/gsaProfile.html

Italy

Arts in Context in London & Florence

The ACM London and Florence Program draws comparisons among the historical and political contexts of art, architecture, literature, and theatre in two historically prominent cities. Coursework is supplemented by visits to museums, galleries, and theatres; short trips to other areas of England and Italy; and discussions with local scholars. Students spend eight weeks in each city. An optional intensive course in Italian language is offered in January.
Duration: Semester

No previous language study is required. The program is open to seniors, juniors, and advanced sophomores.

www.acm.edu/programs/7/lonflo/index.html

Intercollegiate Center for Classical Studies

Based in Rome, the ICCS offers a curriculum exploring classical Roman civilization. The core seminar, The Ancient City, explores aspects of Roman archaeology and topography, as well as the social and urban history of Rome and Roman civilization. Students also choose elective courses from offerings in ancient history and archaeology, Latin literature, and ancient art. Weekly field trips to sites in and near Rome supplement the coursework.
Duration: Semester

This program is designed for students majoring in classics, classical history, archaeology, or art history with strong classical interests and background. All applicants should have a minimum GPA of 3.0. Previous study of Latin and the classical Roman civilization is strongly advised.

http://studyabroad.duke.edu/home/Programs/Semester/ICCS_Rome

Off-Campus Programs

Italian Renaissance Studies in Florence
The ACM Florence Program focuses on Renaissance painting, sculpture, architecture, history, and literature. Italian language instruction, a studio art course, and elective courses provide a broad perspective on Italian contributions to world civilization and facilitate the study of Florentine artistic and cultural heritage. Visits to museums and galleries, short field trips to other cities throughout Italy, and discussions with local scholars supplement the coursework. Students are placed in a home stay to facilitate language development and cultural immersion.
Duration: Semester

Students who will be juniors or seniors during the program with backgrounds in art history, studio art, modern languages, or the humanities are eligible No previous language study is required.

www.acm.edu/programs/6/florence/index.html

Milan Italy
Approved only for B.Mus. and B.A. Music students to pursue music study, IES Milan offers an opportunity to combine highly customized musical instruction with beginning and intermediate language study and area-studies courses taught in English.

Duration: Semester

No previous language study is required.

www.iesabroad.org/IES/Programs/Italy/Milan/milan.html

Rome Italy
ISA Rome offers students the opportunity to enroll at the American University of Rome. All courses are taught in English, and there is no language prerequisite, but a basic knowledge of Italian is encouraged and enrollment in Italian coursework during your time there is required. Courses are available to students in a variety of areas, including humanities, arts, sciences, computer science, history, literature, and language (with an emphasis on Italian and the classics). However, students should only select courses that are appropriate to the Lawrence curriculum. Students are housed in shared apartments in neighborhoods close to the university campus.
Duration: Year, Semester

Previous language study is encouraged but not required.

www.studiesabroad.com/programs/country/italy/city/rome

Off-Campus Programs

Japan

Japan Study

This ACM/GLCA program places students at Waseda University's School of International Liberal Studies in Tokyo, pursuing language study and English-taught Asian studies elective courses. A family-living experience in Tokyo provides an invaluable education in Japanese culture.
Duration: Year, Semester

Preference is given to applicants who will be participating during their junior year. At least one term of Japanese study is required. Selection is competitive and a minimum GPA of 3.0 strictly required.

http://jpns.remotedb.earlham.edu/

Tokyo Japan - Society & Culture program

IES Tokyo offers an opportunity to study Japanese society and culture. Japanese language courses through Kanda University, English-taught program elective courses, and an integrated seminar and field experience introduce students to Japanese social organization. Students are placed in a home stay to facilitate language development. *Note: Lawrence is not affiliated with the "language intensive program."*
Duration: Year, Semester

Previous language study is not required though it is strongly recommended.

www.iesabroad.org/IES/Programs/Japan/Tokyo/Society_and_Culture/tokyoSocietyandCulture.html

Kenya

International Development in Kenya

MSID seeks to engage students in an environment of reciprocal learning concerning local and global problems with a particular focus on development issues. This program allows anthropology, environmental studies, government, psychology, and other students interested in the theoretical and practical implications of international development and social justice to study firsthand the challenges faced by developing countries. Students gain hands-on experience by participating in a community-based internship. Students are placed in a home stay to facilitate community integration.
Duration: Year, Semester

Applicants must have junior or senior status during the program.

www.umabroad.umn.edu/programs/africa/msidKenya/

Off-Campus Programs

Madagascar
SUNY Madagascar Semester

The Madagascar Semester through Stony Brook University offers students interested in anthropology, biology, primatology or ecology an option for field study in biodiverse Ranomafana National Park. During the program, students enroll in four courses: Primate Behavior and Ecology, Ecosystem Diversity and Evolution, Field Methods in Primatology and Field Biology and an Independent Study.

Duration: Semester

This program is open to juniors and seniors, though, well qualified sophomores may be considered.

http://ws.cc.stonybrook.edu/studyabroad/long_madagascar.html

Mexico
Guanajuato Mexico
This International Studies Abroad program offers students the opportunity to pursue integrated study at the Universidad de Guanajuato. Students are placed in a home stay to facilitate language development.
Duration: Summer, Year, Semester

Previous language study is required.

www.studiesabroad.com/programs/country/mexico/city/guanajuato/

Netherlands
Amsterdam Netherlands
IES Amsterdam offers anthropology and gender studies students an opportunity to pursue Dutch language study, integrated study in English at the University of Amsterdam and an integrated tutorial, field, or service-learning experience and field research project. IES also offers a Gender and Sexuality Seminar in which students can enroll.
Duration: Year, Semester

No previous language study is required. The program is open to juniors and seniors. In addition to normal proposal materials, students must submit additional application materials for this program. The final admission decision lies with the host university.

www.iesabroad.org/IES/Programs/Netherlands/Amsterdam/Study_Amsterdam/studyamsterdam.html

Off-Campus Programs

Amsterdam School of Music
Music students may apply to the prestigious Amsterdam School of Music which offers a highly-individualized course of study. Musical training through this program is facilitated and administered by IES. As a large conservatory in the Netherlands, the Amsterdam School of Music takes advantage of the city's established reputation in both classical and contemporary music. The school is dedicated to high standards of teaching, performing, and creating music. Music students participating in this program should be strong in performance, composition, and/or theory and have the motivation and intention to succeed in this individualized and rigorous environment.
Duration: Year, Semester

Applicants must be music majors and have junior or senior standing by the beginning of the program. Final admission decisions rest with the Amsterdam School of Music and additional application materials are required. Admission to this program is often competitive.

www.iesabroad.org/IES/Programs/Netherlands/Amsterdam/Direct_Enrollment/Academics/amsterdamDirectCVA.html

Gerrit Rietveld Academie
Study at the Gerrit Rietveld Academie (GRA) provides a valuable opportunity for studio arts majors to pursue a semester focused on studio work. The GRA is a well-regarded and innovative Dutch art and design school that stresses independence and creativity through highly-individualized curriculum and instruction.
Duration: Year, Semester

No previous language study is required. The program is open to juniors and seniors. In addition to normal proposal materials, students must submit additional application materials for this program. Final admission decisions lie with the host institution.

www.iesabroad.org/IES/Programs/Netherlands/Amsterdam/Academics/amsterdamGerritRietveld.html

New Zealand

Auckland New Zealand
IES Auckland offers students the opportunity for integrated study at the University of Auckland. The university offers courses in a wide variety of disciplines, with especially strong programs in anthropology, natural science, and environmental science. While courses are available in a variety of areas, students should only select courses that are applicable to the Lawrence curriculum.
Duration: Semester

The program is open to juniors and seniors.

www.iesabroad.org/IES/Programs/NewZealand/Auckland/auckland.html

Off-Campus Programs

Russian Federation

Smolny College

The Bard College program partners with Smolny College in St. Petersburg to offer students a comprehensive Russian as a Second Language program in combination with Russian-taught elective courses. The elective courses are integrative and taken with Russian students who are regular degree-seeking students at Smolny.
Duration: Summer, Year, Semester

Previous language study is required.

www.smolny.org/bard-smolny/

Senegal

Francophone Seminar in Senegal

This biennial program in Dakar, Senegal, introduces students to Western African culture. Organized by the Lawrence French department in conjunction with the Baobab Center, participants, accompanied by a Lawrence professor, study the French and Wolof languages, Senegalese history and culture, and Francophone African literature and may arrange individual music lessons. The academic program is supplemented by local excursions, a stay in a rural village and field trips to other parts of the country and region.
Duration: Term

Two years of college level French study is required or the equivalent (completion of French 202). The course *Destination Dakar* is required in the term proceeding the seminar term.

www.lawrence.edu/academics/offcampus/francophone/

Spain

Granada Spain

This ISA program offers Spanish majors a classroom-based program with courses largely taught through the University of Granada program for foreigners. Based on the results of a placement exam administered on site, “advanced” students choose from courses, principally in the humanities, offered through the University of Granada Hispanic studies program. Students who do not pass the placement exam, usually students with “high intermediate” to “low advanced” language skills, may choose from a more limited curriculum in the Spanish Language and Culture program.
Duration: Summer, Year, Semester, Term

Previous language study is required. In order to gain admittance to the Hispanic studies program, students will most likely need to have completed two to three classes beyond Spanish 202.

www.studiesabroad.com/programs/country/spain/city/granada

Off-Campus Programs

Salamanca Spain
IES Salamanca offers Spanish-taught courses focusing on Iberian culture, comparative studies of the Mediterranean Basin, and comparative studies of Spain and Latin America. The majority of students combine program courses with study at the Universidad de Salamanca. The program also offers education and political internships.
Duration: Summer, Year, Semester

Previous language study is required.

www.iesabroad.org/IES/Programs/Spain/Salamanca/salamanca.html

Tanzania
Field Studies in Tanzania
This ACM program offers a unique opportunity to conduct field work in some of the world's greatest paleoanthropological and ecological sites. The program is divided between courses in intensive Kiswahili, human evolution, and ecology at the University of Dar es Salaam and field research in the Northern Region of Tanzania. The program is physically and academically demanding and only well-qualified students will be selected.
Duration: Semester

The program is open to juniors and seniors with prior course work in the natural or social sciences. Previous language study is not required.

www.acm.edu/programs/9/tanzania/index.html

United Kingdom
Arts in Context in London & Florence
The ACM London and Florence Program draws comparisons among the historical and political contexts of art, architecture, literature, and theatre in two historically prominent cities. Coursework is supplemented by visits to museums, galleries, and theatres; short trips to other areas of England and Italy; and discussions with local scholars. Students spend eight weeks in each city. An optional intensive course in Italian language is offered in January.
Duration: Semester

No previous language study is required. The program is open to seniors, juniors, and advanced sophomores.

www.acm.edu/programs/7/lonflo/index.html

Northern Ireland: Democracy & Social Change
Based in Coleraine and Belfast, this program of the Higher Education Consortium for Urban Affairs (HECUA) allows anthropology, education, government, psychology, and other students interested in peace and conflict studies to examine firsthand the transition from conflict to sustainable democracy through classroom study and an internship placement.
Duration: Semester

www.hecua.org/no_ireland.php

Off-Campus Programs

Oxford University
This program offers very strong students with an expressed interest in pursuing advanced study the opportunity to pursue focused study in a single subject area at one of four Oxford colleges: St. Anne's College, St. Edmund Hall, St. Hilda's College (women only), and Lady Margaret Hall. Placements are available across the arts, sciences and social sciences. This is an integrated program of study whereby Lawrence students participate in a given college's tutorial system alongside its degree-seeking students.
Duration: Year, Semester, Term

Applicants must have junior or senior standing at the beginning of the program. Minimum GPA of 3.6. This program is often competitive and the final admission decision lies with the host university.

www.arcadia.edu/abroad/default.aspx?id=6853

University of York
This program creates an opportunity for strong students across a range of majors to study one or two subjects in a British tutorial system similar to that employed at Oxford and Cambridge. This is an integrated program of study whereby Lawrence students participate in a college's tutorial system alongside its degree-seeking students. Students are fully integrated into the residential colleges and social aspects of the university.
Duration: Year, Semester, Term

Minimum GPA of 3.0. Students wishing to study in the English department must complete additional application materials. Final admission decisions rest with the host university.

www.arcadia.edu/abroad/default.aspx?id=6872

Academic Procedures and Regulations

OPPORTUNITIES, OBLIGATIONS, AND RESPONSIBILITIES

Academic procedures and regulations, together with degree, program, and course requirements and the code of student responsibility, form the basis for the equitable and orderly conduct of student academic life at Lawrence University. These rules accord students opportunities, such as the ability to develop a personalized course of study or change a course selection after the first class meeting. They also impose obligations and responsibilities, such as planning a course of study to complete program requirements and maintaining satisfactory academic progress. Students are expected to be thoroughly familiar with the contents of the course catalog, the Online Student Handbook, other contracts, and official notices of the university.

Catalog of record

Students may choose to complete degree requirements using the course catalog in effect at the time they matriculate as degree-seeking students or the current catalog at the time they plan to complete their degree. If requirements for a major, minor, or interdisciplinary area change, students should consult the department or program chair and their major advisor regarding the applicability of current course offerings to the major requirements they intend to complete. Academic regulations and procedures are effective as of the date they are approved by the university, unless otherwise noted.

ACADEMIC ADVISING

Philosophy of Advising

The philosophy that underlies academic advising at Lawrence reflects the university's emphasis on student responsibility and independence. Students have the responsibility for planning and pursuing their own academic programs. All students are assigned a faculty advisor to help with understanding strengths and weaknesses, setting goals, and utilizing resources at Lawrence.

Advisors are not expected to make decisions for advisees except in the case of an underload or overload request, nor are they expected to engage in a personal counseling relationship. Advisors are required to sign petitions and forms only if they have had the opportunity to provide their best advice on the decision. Advisors have the responsibility to advise the student. Students have the responsibility of making the decision.

The Advising Process

Lawrence has a faculty-based advising system. All full-time members of the teaching faculty serve as academic advisors to students. New students are assigned to faculty advisors on the basis of academic interests and availability of faculty for advising. Junior and senior students are required to have advisors in their majors. Any student, however, may change an advisor by completing the Advising Change Form available in the registrar's office and obtaining the signature of the new advisor on that form.

Students are encouraged to consult with other faculty members or the Office of the Dean of Student Academic Services for further advice.

Academic Procedures and Regulations

HONOR CODE

To help maintain an atmosphere of mutual trust and confidence among students and faculty members and to ensure that each student is judged solely according to his or her own merits, the Lawrence University community has established the following honor code:
No Lawrence student will unfairly advance his or her own academic performance nor will the student in any way intentionally limit or impede the academic performance or intellectual pursuits of other students of the Lawrence community.

The Lawrence community firmly believes in the academic atmosphere this Honor Code is intended to ensure. An academic honor system secures freedoms, conveniences, and privileges that otherwise would not be available to students, creating an atmosphere in which they can learn without constant surveillance.

Students are responsible for understanding the Honor Code, and the Honor Council provides extensive information to all students. The council does not consider ignorance or negligence as excuses when determining whether or not an Honor Code violation has occurred.

Pledge and reaffirmation

As members of the Lawrence University community, students are required to sign the following Honor Pledge. By doing so, they affirm their belief in the value of the stipulations of the system:
I hereby affirm that I understand and accept the responsibilities and stipulations of the Lawrence University Honor System.

Furthermore, students must reaffirm the Honor Code by writing “I reaffirm the Lawrence University Honor Pledge,” followed by their signatures, on all submitted work.

Honor Council

The Honor System is administered by the Honor Council, which consists of ten students. The Council is responsible for educating the Lawrence community about the Honor Code and for acting as a judicial body when suspected violations occur. The dean of student academic services serves as a non-voting administrative advisor to the Honor Council.

Every member of the Lawrence community is responsible for upholding the Honor System. If a member of the community suspects a violation, he
or she has two options: to contact the faculty member involved, the dean of student academic services, or a member of the Honor Council or to discuss the concerns directly with the student involved. The reporting of a suspected violation does not commit the student to pursuing additional action.

For more information, please refer to the full Honor System Charter and related information contained on the Honor Council webpage.

Academic Procedures and Regulations

THREE-TERM SYSTEM AND COURSE LOADS

Lawrence University has a three-term schedule. Each term consists of ten weeks of classes followed by four days of examinations, which are considered an integral part of the term. The term ends with the completion of final exams. The normal class periods under this plan are three 70-minute sessions per week (Monday, Wednesday, and Friday) or two 110-minute sessions per week (Tuesday and Thursday).

Standard Class Periods

8:30-9:40 a.m.	MWF
9:50-11 a.m.	MWF
11:10 a.m.-12:20 p.m.	MWF
12:30-1:40 p.m.	MWF
1:50-3 p.m.	MWF
3:10-4:20 p.m.	MWF
9:00-10:50 a.m.	TuTh
12:30-2:20 p.m.	TuTh
2:30-4:20 p.m.	TuTh

Courses are recorded using a term-course system. A standard course is six units. For purposes of transcript evaluation, six units may be considered the equivalent of three and one-third (3-1/3) semester hours or five (5) quarter hours. A six-unit course
that includes extra class or laboratory sessions is the equivalent in content to courses that carry five semester hours or eight quarter hours at some other institutions.

Students who arrange their programs in the normal pattern take three courses (18 units) each term. A course load of 15 units per term is required for certification as a full-time student; a course load of 21 units is required for full-time status in the student-teaching semester and semester-length off-campus programs.

Overloads/Underloads

Students must receive permission from their advisors to take 24 or more units in a single term. A B average for the preceding three terms is generally expected of students requesting permission to overload. Students in the university should normally take no more than two partial courses (less than 6 units each) above the standard three-course load in any one term. Students who regularly take more than a standard load each term run the risk of failing to meet the 12/15-term tuition requirement.

Students who desire to overload must submit an overload form to the Registrar’s Office at the beginning of the term and before the eighth day of classes. Students may find it educationally advantageous to choose a reduced program for one or more terms. Students considering a reduced load should consult with their academic advisors and carefully investigate the consequences of dropping below full-time status.

Less-than-full-time status can affect time to completion of the degree, financial aid, insurance, loan deferments, immigration status, or eligibility for participation in athletics

The Incremental Fee Plan may be applicable if an overload or underload program is elected.

REGISTRATION

Registration for all students is conducted through the Voyager Information System, which is accessible both on and off campus via the Internet. Announcements and other information about registration and course offerings will be sent to students at their Lawrence e-mail addresses. Instructions for registration can be found at www.lawrence.edu/dept/registrar/webreg.shtml.

Students may view their registration status and assigned times in Voyager. In order to register or make schedule changes during each assigned period, students must meet with their faculty advisors, obtain any required course approvals from instructors, and clear all registration holds (Financial Services, Health Center, Registrar's Office, and deans). Students with registration holds on their records should contact the appropriate office directly.

The schedule of classes for current and future terms is published at www.lawrence.edu/dept/registrar/

Advance registration

Advance registration for the next academic year begins in the Spring Term. All continuing, degree-seeking students will be eligible to register at this time. Students are expected to consult with their academic advisors about their academic progress and proposed program for the following year before the registration period opens. Continuing students must advance-register in order to participate in the housing selection process.

Advance registration for new freshmen, transfer students, visiting-exchange students, and Waseda Program students begins over the summer. Preliminary registration materials and program-planning information will be sent to new students by the dean of student academic services. During Welcome Week in the fall, new students will meet with their academic advisors and make any necessary changes to their course registrations using the Voyager Information System. Students entering Lawrence in the middle of the academic year will register at the beginning of the term in which they first enroll.

Term registration

After the first round of advance registration, students may register and make class changes for future terms during the first two weeks of classes and from the fifth through the tenth week of classes each term. Students should check their registration-status page in Voyager for assigned registration days and times. The last opportunity for students to register or make class changes for any term is during the first ten days of classes (first two weeks).

It is the student's responsibility to maintain an accurate registration record. Failure to do so can result in (1) receiving no credit for a completed course; (2) receiving a failing grade in a course not taken; (3) failing to be certified as a full-time student for insurance, financial aid, immigration, or other purposes; and (4) being assessed a late registration fee to correct registration errors. Students who need to correct class registrations after the tenth day of classes must petition the Faculty Subcommittee on Administration. The deadline for submitting these petitions is the last day of classes of the academic term immediately following the term for which a registration change is being requested.

After the term begins, students wishing to register for a limited-enrollment class must obtain the approval of the instructor. Please see the section on limited enrollment classes (below). Beginning the sixth day of classes of the term (beginning of the second week), students must obtain the approval of the instructor to register for any class. In order to make class changes, all registration holds (academic advising, Financial Services, deans, Health Center, and Registrar's Office) must be cleared. The deadline for submission of special registration forms (registration for tutorials, independent study, internships, and supervised accompanying; S/U option form) is also the end of the tenth day of classes for the term.

Registration for non-degree students
Individuals attending classes as non-degree students are required to register at the beginning of each term and may not advance-register for future terms. Such students include members of the local community taking courses for personal growth, college graduates seeking teacher certification, and high school students in the Lawrence Academy Program. Non-degree students must obtain the approval of each instructor and meet with their academic advisor before they will be able to register through the Voyager system. Priority will be given to degree-seeking students when classes are over-subscribed.

Fees for late registration
$25 per late class cancellation or addition approved from the third week of the term through the last day of classes, up to a maximum of $200 for the term.

$50 per late class cancellation or addition approved after the last day of classes for the term; no maximum.

The Faculty Subcommittee on Administration may waive the late registration fee when a class change was delayed due to exceptional circumstances such as illness, family emergency, a curricular decision that could not be made by registration deadlines, etc. The student is responsible for documenting such an exceptional circumstance as part of the petition.

LIMITED-ENROLLMENT CLASSES

When a limited-enrollment class is filled, students may request to be added to a waiting list through the Voyager Information System. At intervals, the Registrar's Office will review the waiting lists and add students to classes in rank order should spaces become available. Students added to classes from waiting lists will be notified. Students may remove themselves from waiting lists or drop classes to which they have been added by using the Voyager Information System.
At the beginning of the term, all students registered for a limited-enrollment class and any students on the waiting list who still wish to enroll must attend the first class meeting. At that time, the instructor may choose to drop from the class registered students not in attendance and admit students to the class from the waiting list. Students admitted to the class by the instructor must use the Voyager Information System to register for the class.

PREREQUISITE CHECKING
Prerequisites provide important information to students constructing their academic program plans. A course prerequisite may be composed of a list of specific courses to be completed, a description of skill level previously achieved, or a combination of both. Prerequisites are listed in the class schedule and the course catalog. This information is provided by instructors and academic departments to help students understand what prior preparation will be expected and

will contribute to a successful experience in the course. It is the responsibility of the student to review prerequisites before registering for a class.

It is assumed that all students will have completed the prerequisites for every course for which they are registered prior to the first day of classes. Students who do not meet the prerequisites, but are interested in taking the course, must contact the instructor for permission. Students who believe transfer credit or credit from advanced-placement examinations should be applied to the prerequisites also must contact the instructor for permission to take the class.

During the first week of classes, instructors may cancel the registration of students who have not met prerequisites. Students may be asked to document that the prerequisites for a course are complete.

WITHDRAWING FROM COURSES

Students are permitted to withdraw passing (WP) from one of their classes after the second week of the term and through the Friday of the seventh week of the term. The instructor must confirm the student's last date of attendance and certify the student completed all work and earned a passing grade. Written acknowledgement from the student's faculty advisor also is required. A form is available from the registrar's office for this purpose. The grade of WP is recorded on the student's record but has no effect on the grade-point averages.

A student must petition the Faculty Subcommittee on Administration to withdraw passing if any of the following apply. He or she:

1. is withdrawing from more than one class in the term, or
2. has already withdrawn from three classes during his or her career at Lawrence, or
3. is on probation, or
4. is unable to complete the class after the seventh-week deadline.

Students may withdraw failing (WF) from a class through the last day of classes for the term with the permission of the instructor, the faculty advisor, and the dean of student academic services. A grade of WF is recorded on the student's record and appears in the grade-point averages as an F grade.

Students who officially withdraw from the university during the term will have grades of WP and WF posted on their record depending on whether they were passing or failing their classes at the time of withdrawal. WF grades in this particular case will not be included in the grade-point averages.

CLASS ATTENDANCE

Instructors may, at their own discretion, require attendance and/or take attendance into account in determining grades. Students should check class-attendance expectations with instructors at the beginning of each term. Whatever the attendance expectations may be for a class, students are responsible for all class obligations.

Students who wish to cancel or withdraw from a class after the term begins should notify the instructor of their intention promptly, as the instructor will be asked to verify the date the student last attended.

Academic Procedures and Regulations

FINAL EXAMINATIONS

All final examinations are given and taken during the examination period. An examination schedule is published by the registrar before the fifth week of the term. Individual students who wish to change the time of a scheduled examination must petition the Faculty Subcommittee on Administration no later than Wednesday of the tenth week of classes.

Petitions to change final exams for travel purposes will not be approved. An exam time for the whole class may be changed only with the unanimous consent of the class members and with the permission of the provost and dean of the faculty. During the last week of classes, no examinations or tests may be given in class or as take-home exercises.

Individual students who wish to change the examination time for single courses must petition the Faculty Subcommittee on Administration. Students who have three examinations on the same day may request a change of the time of one of them by such petition. The Faculty Subcommittee on Administration also entertains petitions for change of examination times for reasons of healthy, family considerations, summer academic programs, etc.

It is a faculty member's prerogative to establish the conditions for his or her particular exam. If no specifications are given, however, the exam will be taken in class without books, notes, or discussion among the students.

ACADEMIC ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

The Lawrence University Policy Applying to Nondiscrimination on the Basis of Disability
"No otherwise qualified handicapped individual shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."
— Section 504 of the Rehabilitation Act of 1973

The commitment of Lawrence University to provide a quality liberal education carries with it a commitment to a learning environment that provides all students with an equal opportunity for academic success.

Lawrence, in compliance with Section 504 of the Rehabilitation Act of 1973, recognizes that qualified students who have diagnosed handicaps, including specific learning disabilities, are entitled to an equal opportunity to benefit from the educational program of the university and that reasonable academic accommodations may be necessary to provide that opportunity.

Requesting an accommodation

Students who have a disability covered by the Americans with Disabilities Act are entitled to academic accommodations. Students with disabilities must initiate all requests.

To request appropriate accommodations, a student must file a copy of the formal evaluation from a physician or clinical psychologist, depending on the disability, with the Office of Student Academic Services. This report will be kept in a confidential file. After the office has received this report, the student may request appropriate accommodations by discussing the request with the academic advisor and completing the request form, which must be signed by the academic advisor.

The academic accommodation system at Lawrence is based on the university's educational philosophy emphasizing student responsibility and independence. All requests for

accommodations must be initiated by the student. No automatic notification of instructors occurs without a student request. No student with a disability is required to tell instructors about the disability or to request accommodations.

To inquire about accommodations, please contact the Office of Student Academic Services, which can provide all appropriate information and advice.

GRADING SYSTEM
Grading scale and grade symbols

A	Excellent	4 x value of the course
A–		3.75 x value of the course
B+		3.25 x value of the course
B	Good	3 x value of the course
B–		2.75 x value of the course
C+		2.25 x value of the course
C	Satisfactory	2 x value of the course
C–		1.75 x value of the course
D+		1.25 x value of the course
D	Passing but unsatisfactory	1 x value of the course
D–		0.75 x value of the course
F	Failing	0
WF	Withdrew Failing:	0, except upon approved withdrawal from the university before the end of the term
WP	Withdrew Passing:	no course credit
S	Satisfactory:	equivalent to a C– or better but does not affect grade-point averages
U	Unsatisfactory:	equivalent to D+ or below, but does not affect grade-point averages; no course credit
I	Incomplete:	may be reported only for students who did not complete the coursework because of circumstances beyond their control, such as illness. Students must submit a request for an incomplete to the dean of student academic services before the end of the last day of classes. The dean will consult with the instructor in making the decision. An incomplete must be removed by the date set by the dean, subject to approved extensions; failure to complete the work can result in the recording of an F (U if the course was carried on an S/U basis).
IP	In Progress:	may be used to designate the first term of tutorial work or independent study for which students will be registered for additional credit for two or three terms; replaced by the final grade when that grade is reported.
AU	Audit:	this option may not be used by degree-seeking students and confers no credit.
NR	Not Reported:	no valid grade reported. Grade will lapse to F (U if the course was carried on an S/U basis) if a valid grade is not reported shortly after the end of the term.
*		Withdrawal from term
#	Repeated course:	credit is not applied to degree and grade is not used in computation of degree GPA

Academic Procedures and Regulations

All grades, except approved incompletes or IP grades, are final when they are recorded with the registrar. Grades are due, according to faculty legislation, 72 hours after the end of the examination in the class or, if there is no examination, no later then 72 hours after the published examination period. The Faculty Subcommittee on Administration reviews student records for academic progress shortly after grades have been submitted.

Satisfactory/unsatisfactory option
The S/U option is provided to encourage students to explore new academic disciplines. The decision to exercise this option must be made by the end of the second week of classes. It is not intended to be used as a means of grade protection after students have assessed their ability to complete required coursework satisfactorily. The S/U option may not be used in some courses. Please refer to the course description for more information.

Students who have completed 54 units may elect to take one class per term outside their major/minor and major/minor department on a Satisfactory/Unsatisfactory basis. Students with a minor in Latin may take a course in Greek on an S/U basis. Students with a minor in Greek may take a course in Latin on an S/U basis. Students with a minor in studio art may take a course in art history on an S/U basis. Students with a minor in art history may take a course in studio art on an S/U basis. Students with a minor in Chinese may take a course in Japanese on an S/U basis. Students with a minor in Japanese may take a course in Chinese on an S/U basis. Students who carry more than 18 units may also exercise the S/U option for the overload class. No more than four grades of S or U resulting from the option may appear on a student's transcript at any one time.

Students may at any time (e.g., during the term in which a course is taken S/U or after the course has been completed) change the basis of grading in a course from S/U to a letter grade; they may not change from a letter grade to S/U. Instructors submit letter grades (A-F) for all courses not offered strictly on an S/U basis. The registrar then converts the letter grades to S or U for those students who have elected the S/U option. Grades of C- or above become Satisfactory; grades of D+ or below become Unsatisfactory. A satisfactory performance ensures credit toward graduation but does not affect grade-point averages. An unsatisfactory performance does not confer credit, nor does it affect the grade-point average.

Repeating courses
Students are permitted to repeat courses in which a grade of F is received. Both the original F and the new grade will be recorded on the permanent record. Only the second grade, however, will count in the degree GPA. If the course is in the student's major or minor department, only the second grade will count in the major or minor GPA. Both the original F and the repeat grade will count in the composite GPA (see "Grade Point Averages,").

Students who have withdrawn from a class (WP or WF) have not completed the course and are free to take it again. A grade of WF is treated like an F when a course is repeated. Only the grade for the repeated course will count in the degree and major GPAs. Both the original WF and the repeat grade will count in the composite GPA.

Students must submit a repeat-course form (www.lawrence.edu/dept/registrar/) to the registrar's office to initiate the procedure for repeating a course.

Academic Procedures and Regulations

Grade reporting and transcripts
Grades become visible to students, academic advisors, and administrative personnel in the Voyager Information System once all end-of-term processing has been completed, approximately 7-10 days after the last day of final examinations. Grades will not be given to students on an individual basis until grade processing is complete, nor will they be given to students over the phone. Students may obtain unofficial transcripts of their academic history and a degree summary report through the Voyager Information System

Students are responsible for keeping parents, guardians, scholarship foundations, insurance companies, and any others as needed informed about their academic progress. A grade report will be sent to parents only upon the written request of the student. A form for this purpose can be obtained in the registrar's office.

To obtain an official transcript, a student must make a request in writing, giving permission to release the transcript to a third party. A charge of $5 (which includes tax) will be assessed for each official transcript requested. Additional fees will also be assessed for special shipping arrangements such as overnight delivery or fax. Students should be aware that transcripts will not be sent after the last day of classes until grades for the term have been posted and the academic-progress review is complete. Transcript requests are usually fulfilled within 3-5 days.

Official transcripts are issued only for students whose accounts with Financial Services are clear.

Grade changes
A grade submitted to the registrar can be changed only with approval of the university faculty at the request of the instructor. The instructor must submit a request for a change of grade in writing to the faculty secretary. The change will take effect upon approval of the faculty minutes in which the request is recorded.

A change of grade is permitted for reassessment of work previously evaluated or for the correction of an error in the calculation or reporting of a grade. The instructor states which reason applies. Grade changes are not permitted for work submitted after the class has concluded.

Grade-point averages
Lawrence uses four grade-point averages: major, minor, degree, and composite. The averages are used to determine academic progress, fulfillment of degree requirements, and honors in course at graduation.

The major GPA includes all courses in the student's major department and those courses outside the department required for the major.

Courses taken on the Lawrence campus, as well as courses completed at approved Lawrence off-campus programs (please see "Off-Campus Programs,") are included in the major GPA. Courses accepted for transfer credit from other institutions are not included. A student must earn a major GPA of 2.000 or above to graduate.

The minor GPA includes all courses in the student's minor department and those courses outside the department required for the minor. Courses taken on the Lawrence campus as well as courses completed at approved Lawrence off-campus programs are included in the minor

GPA. Students must earn a minor GPA of 2.000 in order to complete the minor and have it recorded on their academic record.

The degree GPA includes all courses taken on the Lawrence campus or at approved Lawrence off-campus programs. It is used to determine academic actions and, in conjunction with the composite GPA, honors in course at graduation. A student must earn a degree GPA of 2.000 or above to graduate.

The composite GPA includes all courses included in the degree GPA plus any courses taken at other colleges and universities. The composite GPA is used, in conjunction with the degree GPA, to determine honors in course at graduation and selection for awards and membership in honorary societies.

ACADEMIC PROGRESS

Lawrence University normally expects students to complete their work toward graduation in four years — or five years in the case of students in the B.A./B.Mus. program. At the time of matriculation, the university determines the class standing of each student on the basis of transfer and advanced placement credits, if any, accepted by Lawrence. Thereafter, the number of credits earned at Lawrence and the cumulative degree grade-point average determine a student's academic progress.

Generally, full-time students are expected to progress toward graduation according to the following guidelines. At the end of the freshman year, or three terms, a student should have completed at least 48 units and have a minimum GPA of 1.833. At the end of the sophomore year, or six terms, a student should have completed at least 102 units and have a minimum GPA of 2.000. Students who do not meet these guidelines, receive failing grades, or display other indications of unsatisfactory progress may be warned, placed on academic probation or strict probation, suspended, or required to withdraw from the university.

Students must be in good academic standing to participate in off-campus programs sponsored by Lawrence, the Associated Colleges of the Midwest or other organizations with which Lawrence has consortial agreements.

Students placed on strict probation are not eligible to participate in either extracurricular performances or sports (varsity, junior-varsity, or club), nor may they hold a position of responsibility, elected or volunteer, in any Lawrence University Community Council-sanctioned activity or Greek organization.

The spirit of this eligibility restriction is to limit any significant extracurricular activity but not necessarily to eliminate nominal participation, such as attendance at a meeting.

Additional information on policies governing academic progress and standing is contained in "Guidelines for Academic Action," which may be obtained from the dean of student academic services.

TRANSFER BETWEEN DEGREE PROGRAMS WITHIN THE UNIVERSITY

Students who find that their interests have changed may apply to transfer to a different degree program within the university. An application for transfer is made as a petition for admission to the intended program. B.Mus. students who wish to transfer to the B.A. degree program should direct their petitions to the Faculty Subcommittee on Administration. B.A. students who wish to

transfer to the B.Mus. degree program should direct their petitions to the Conservatory Committee on Administration.

Students in the five-year B.A./B.Mus. degree program may drop one of their degrees and move to a single-degree program (either the B.A. or the B.Mus.) by notifying the registrar's office.

Any student considering transferring to a different degree program should, at a minimum, consult with his or her advisor, the dean of the conservatory, and the dean of student academic services in order to assess the consequences of such a move. A petition for transfer should not only speak to the reasons for the change but also present a plan for completing the requirements of the new degree program. In the case of transfer to the B.Mus. degree program, an audition or other qualifying examination may be required. Students who transfer to a different program after their second year of study usually will need to extend the time required for completion of their degrees.

DECLARATION OF A MAJOR
Students are required to declare a major by the beginning of their junior year but may do so at any time by completing a form available in the registrar's office. Students must also have an academic advisor in their major department no later than the beginning of their junior year. The formal declaration of a major and change of advisors does not preclude students from seeking additional counsel about their academic programs from any member of the faculty.

DECLARATION OF MINORS AND INTERDISCIPLINARY AREAS
In addition to completing degree and major requirements, students may choose to complete the requirements for a minor or an interdisciplinary area. Students may declare their intent to pursue such programs by completing a form available in the registrar's office. Students are strongly encouraged to consult with the appropriate department chair or program director on a regular basis about their course selections. Some departments or programs may expect students to have a formal advisor for the minor or interdisciplinary area.

TRANSFER CREDIT
Transfer Credit Academic work completed at other institutions of higher education will be evaluated to determine the courses and credit to be transferred and applied to a Lawrence degree. Evaluations are based on official transcripts received directly from U.S. accredited colleges and universities, or a report from Educational Credential Evaluators, Inc., in the case of foreign institutions. Only courses applicable to the programs and degrees offered by Lawrence and graded at a C- or better will be transferred. Students may be asked to provide course descriptions, syllabi or other information if a determination cannot be made from the transcript information alone. Credit is normally granted on the basis of 6 Lawrence units for three-and-one-third semester hours or five quarter hours.

Coursework from other institutions may not be used to fulfill the writing or speaking General Education Requirements. Individual academic departments and programs will determine if transfer credit fulfills major, minor, or interdisciplinary-area requirements. Students should review the requirements for their degree for important information on residence requirements and limits on the total transfer credit that may be applied to a Lawrence degree. Transfer credit and transfer grade points are used only in the computation of the composite GPA.

Evaluation of credit for transfer students
Transfer students must have official transcripts sent to Lawrence from their former institutions as part of the application process. Once a student is admitted, the registrar will evaluate the work for transfer. The registrar's evaluation will include: a list of courses accepted toward a Lawrence degree; the Lawrence unit value awarded to each accepted course; the total units accepted; a statement of the value of the grades earned at the former institution in the student's cumulative composite grade-point average; a notation of courses that may be transferred pending completion of work, review of descriptions and syllabi, or review by a Lawrence department; a notation of courses denied for unsatisfactory grades or because the content is not applicable to a Lawrence Bachelor of Arts or Bachelor of Music degree; a statement of the work required for graduation; and a statement of the students academic class standing on entry. Depending on work transferred and major selected at Lawrence, transfer students may need to complete additional credit beyond the minimum required for their Lawrence degree program in order to fulfill all degree requirements.

College work completed in high school
Students who have taken college-level courses while in high school may be granted up to 42 Lawrence units for such work.

Transfer of credit for continuing students
Students who wish to attend summer school or undertake a period of study at another institution must petition the Faculty Subcommittee on Administration for approval of their proposed course of study. Petitions must include titles and descriptions of courses; length of session or term and, in the case of summer work, number of hours of participation (class, laboratory, field, or studio); and statements of support from the student's advisor and from the chairs of the departments that would offer the courses were they part of the Lawrence curriculum. In some cases syllabi may be requested in order to make a determination. Normally no more than 12 Lawrence units may be earned in a summer session. The transfer credit will be applied to degree requirements as appropriate based on the subject of the course. If the student wishes the work to fulfill a particular general education diversity or competency requirement that desire should be clearly stated in the petition (usually a syllabus will be needed to make this determination). It is expected that the student and academic advisor have reviewed the implications of transfer credit with respect to degree requirements such as the residence requirements. Transfer credit is used only in computing the student's composite GPA. It will not change the student's degree GPA.

The Faculty Subcommittee on Administration will notify the student of courses approved for transfer and grades required. The student will also be notified if an examination at Lawrence will be required before credit is awarded. The student will be expected to arrange for the appropriate documentation to be sent to Lawrence upon the completion of the work (see the general rules for transfer credit above). Grade reports or transcripts submitted by the student will not be accepted.

CREDIT FOR ADVANCED PLACEMENT EXAMINATIONS
The Advanced Placement program of the College Board offers high school students the opportunity to study prescribed courses in many subject areas and to take nationally administered examinations on these courses. Lawrence will give 6 units in the appropriate discipline for a score of 4 or 5 on an advanced placement examination, except for multiple examinations with substantial shared material, for which the credit granted may be limited to 6 units. Individual departments may decide to award additional credit.

Credit awarded for advanced-placement examinations may be used to fulfill the competency and diversity General Education Requirements as appropriate. Such credit may not be applied to distribution requirements. Individual departments will determine whether advanced-placement credit fulfills major or minor requirements and the placement of students who wish to undertake further work in that discipline.

CREDIT FOR INTERNATIONAL BACCALAUREATE PROGRAM
Credit may be awarded for International Baccalaureate (IB) examinations in subject areas applicable to the liberal arts curriculum at Lawrence University where a student has earned a score of 5, 6, or 7. Students who have earned an IB diploma may receive 6 units of credit for each IB higher-level examination and 3 units of credit for each subsidiary-level examination. Students who have not earned an IB diploma but have completed individual IB examinations may receive 6 units of credit for each higher-level examination. A maximum of 48 units of credit may be awarded.

Current subject areas acceptable for credit include: language A1, second language, economics, history, Islamic history, philosophy, psychology, social and cultural anthropology, biology, chemistry, physics, environmental systems, mathematics, computer science, film studies, music, theatre arts, and visual arts. Placement in Lawrence courses based on IB examination credit will be determined by the appropriate academic department or program.

Credit awarded for IB examinations will be applied to competency and diversity General Education Requirements as appropriate. Such credit may not be applied to distribution requirements. Individual departments will determine whether advanced-placement credit fulfills major or minor requirements and the placement of students who wish to undertake further work in that discipline.

COMPLETION OF THE FOREIGN LANGUAGE GENERAL EDUCATION REQUIREMENT
Students, including heritage speakers of foreign languages taught at Lawrence, fulfill the language requirement by demonstrating proficiency in all four skills (listening, speaking, reading, and writing) at the 200 level or above (Bachelor of Arts) or at the level of 102 or above (Bachelor of Music). Students may demonstrate proficiency in a variety of ways:
Coursework in languages taught at Lawrence

- Students may begin or continue language study at Lawrence and fulfill the requirement by completing a course at the appropriate level.
- Students may participate in certain affiliated off-campus programs with language components and fulfill the requirement by completing a course at the appropriate level. Not all programs have qualifying courses. A list of programs is available through the Office of International and Off-Campus Programs.

Examinations

- By taking and passing the Lawrence University proficiency examination in a foreign language at the appropriate level. The language department involved will determine placement and whether the foreign language General Education Requirement will be waived. Degree credit is not awarded for these examinations.
- By obtaining a score of 4 or 5 on the College Board Advanced Placement Examination or a score of 6 or above on an International Baccalaureate Examination in foreign language. This option carries credit equal to one six-unit course.

Additional Examination Options for Spanish

- By obtaining a score of 630 or higher on the SAT II Spanish or Spanish with Listening exam. No additional academic credit is awarded.
- By presenting documentation for CLEP credits in Spanish. Four CLEP semesters will complete the requirement for the B.A. and B.A./B.Mus. degree programs. Two CLEP semesters will complete the requirement for the B.Mus. degree program. No degree credit will be awarded for CLEP examinations.

Languages other than those taught at Lawrence
Students, including those participating in affiliated off-campus programs with a language component who have studied a foreign language other than those taught at Lawrence and wish to use it to complete the requirement must demonstrate proficiency in all four skills (see above) at the 200 level (B.A.) or at the level of 102 or above (B.Mus.). They shall demonstrate proficiency in one of the following ways:

- Completing equivalent coursework at the appropriate level. (Courses could be taken at any other institution and then transferred back to Lawrence.)
- By taking and passing a proficiency examination in the language. (This process may be facilitated locally by the dean of student academic services.)

In those cases where placement or proficiency tests are not available locally, students shall petition to use another form of evaluation. This evaluation must be administered and certified by an outside authority who will (a) identify his/her expertise in the language, (b) describe the methods by which he/she assessed the proficiency of the student, and (c) provide a diagnostic report on the level of proficiency the student has obtained in the four skills.

Native Speakers
- The requirement will be waived for international students whose high school program was conducted in a language other than English. They will need to provide documented proof (e.g., high school diploma) verifying that this was indeed the case.
- Students whose native language is not English must demonstrate proficiency in that native language if their high school program was conducted primarily in English. For written languages, proficiency includes the ability to read and write the language. For languages in which proficiency cannot be assessed by a Lawrence faculty member, students must provide a letter from a person in authority (e.g., a headmaster or teacher) who is not a family member, along with any other relevant documentation attesting to the student's proficiency in the language. Such documentation should be submitted by the end of the student's first three terms at Lawrence.

LEAVES OF ABSENCE AND WITHDRAWAL
A student who wishes to leave the university should request a leave of absence or withdrawal by completing the request form available from the dean of student academic services. The dean, using faculty legislation, will review the request and, upon its approval, will notify all appropriate university offices.

A student granted a leave may return at any time prior to the expiration of the leave; otherwise a student is expected to return at the end of the leave or request an extension prior to the end of the leave. A student who does not return at the expiration of his or her leave, and is not granted an extension, is withdrawn from the university. Such a student who then wishes to return must petition the Faculty Subcommittee on Administration for readmission. Any student who, without a leave of absence, terminates his or her enrollment at Lawrence or in a Lawrence-sponsored

program is withdrawn from the university and, like a student who overstays a leave of absence, may return only upon approval of a petition for readmission.

Petitions for readmission are directed to the dean of student academic services for consideration by the Faculty Subcommittee on Administration. The petition should include a clear and detailed explanation of why the student terminated his or her enrollment or overstayed a leave of absence, what academic or other worthwhile activities occupied the student while he or she was withdrawn from the university, and why the student wants to be readmitted.

A student who does not follow these procedures for a leave or a withdrawal or who fails to meet refund deadlines may forfeit the continuing-enrollment deposit.

DEAN'S LIST

The Dean's List is an annual honor roll of students demonstrating exemplary academic performance. The list is compiled at the end of June after Term III grades have been posted. To be included on the Dean's List a student's record must meet the following qualifications:

- The student must have earned a 3.400 GPA for the year in all A-F graded courses.
- The student must have earned at least 36 units in A-F graded courses during the year.
- The student must have no unsatisfactory grades (U, D+, D, D-, or F) in courses taken during the year.
- The student must have no grades of I or NR, except where the NR is due to a faculty member's not turning in grades for the course.

CONFERRING OF DEGREES AND GRADUATION

Lawrence confers degrees at the end of the Fall and Spring Terms each year but holds its Commencement only once, in June. Degrees are not conferred automatically. Students must apply for graduation by completing an application distributed by the registrar's office. Receipt of a completed graduation application initiates a review of the student's academic record for completion of degree requirements. All grades, official transcripts, and other certifying documents, such as the major-completion form, must be filed at the registrar's office before a degree can be awarded. Students enrolled in the five-year B.A./B.Mus. program must complete all program requirements before receiving either degree.

Once a degree is conferred, a student may not apply additional credit to that degree.

Participation in Commencement is a privilege earned by students who complete degree requirements. Students who expect to finish and receive their degrees by the end of the calendar year may petition to participate in Commencement the June before their degree is conferred. Petitions to participate in Commencement must be submitted to the Faculty Subcommittee on Administration no later than April 15.

When a degree is conferred, a citation is posted to the student's record noting the date and nature of the degree awarded. This information will be included in all transcripts requested after the degree date. Diplomas are printed once each year and distributed at Commencement in June. Official transcripts, diplomas, and letters certifying completion of all requirements will be released only for students whose accounts with Financial Services are clear.

Academic Procedures and Regulations

HONORS AT GRADUATION

The faculty of Lawrence University grants honors at graduation both to encourage students to do superior academic work and to recognize superior performance. Honors in Course and Honors in Independent Study recognize two distinctive kinds of academic achievement; some students each year receive both types of honors. Students who have distinguished themselves in fulfilling the requirements for the bachelor's degree are awarded Honors in Course, primarily on the basis of their cumulative grade-point averages, while those who have completed significant independent projects may submit their work for evaluation for Honors in Independent Study. Both types of honors are indicated in the Commencement program and on official transcripts, and both are granted in three grades, cum laude, magna cum laude, and summa cum laude, by vote of the faculty acting on the recommendation of the university Committee on Honors.

Honors in course

Performance in courses taken at Lawrence or as part of Lawrence-approved off-campus programs (degree GPA), as well as a student's entire academic record (composite GPA), determines a student's eligibility to receive honors. The committee uses as guidelines the following grade-point averages:
3.40 to 3.69 for *cum laude*
3.70 to 3.89 for *magna cum laude*
3.90 to 4.00 for *summa cum laude*

Honors in Course are not awarded automatically, however. The committee examines all students' records individually and recognizes that in certain situations cumulative averages are not accurate measures of a student's achievements in course. If, for example, a student has taken an unusually large number of courses on a S/U basis, has completed an unusual student-designed major, or has performed with distinction on a departmental examination, the committee may consider departmental or committee evaluations and other relevant data.

Students who transfer from other colleges or universities, as well as students who undertake virtually all of their coursework at Lawrence, qualify for Honors in Course on the same basis. Students normally must achieve the stated guidelines in both the degree GPA and the composite GPA to qualify for a given level of honors.

Honors in Independent Study
Students may also earn honors at graduation through the successful completion of an honors project (see "Honors Projects" in Student-Initiated Courses.)

CONFIDENTIALITY OF STUDENT EDUCATION RECORDS

Lawrence requires students to give consent in writing before any personally identifiable information from their education records can be released, except to the extent allowed by the Family Educational Rights and Privacy Act (FERPA). It is each student's responsibility to communicate information about grades, academic progress, or disciplinary actions to parents, guardians, or other family members.

For further information about student rights with respect to education records, FERPA, and release of education records, see the Online Student Handbook.

Academic Procedures and Regulations

PETITIONS FOR EXCEPTIONS TO ACADEMIC REGULATIONS

University regulations govern the academic progress of students, the welfare of the community, and the equitable and orderly conduct of university affairs. On occasion, however, individual circumstances may warrant exceptions to established regulations, and students may petition the appropriate officer of the university or university committee for such exceptions.

Petitions for exceptions to social regulations should be directed to the dean of students; petitions for exceptions to academic regulations should be directed to the Faculty Subcommittee on Administration via the registrar or dean of student academic services; petitions for exceptions to conservatory requirements should be directed to the dean of the conservatory; and petitions concerning business affairs should be directed to the executive vice president. Petitions will be reviewed by the appropriate entity and decisions communicated to the petitioning students. In the specific case of corrections to class registration (dropping or adding a class), petitions must be submitted by the end of the academic term immediately following the term for which a class registration correction is being requested.

Petitions should contain a clear and detailed statement of the exception requested and the reasons for the request. Students should review petitions with faculty advisors and others who may be involved, such as instructors, department chairs, or deans, and seek their approval. Petitions for exceptions to academic regulations must contain the signature of the student's advisor(s) and, depending on the exception requested, the instructor's or department chair's signature may also be required.

GRIEVANCE PROCEDURES

On occasion, students may have a grievance concerning the action or lack of action of a member of the Lawrence community in a matter unrelated to the policies on sexual harassment and sexual assault (see the Online Student Handbook). The grievance procedures should be utilized to seek a resolution to the situation that is acceptable to all parties concerned.

1. The student shall first attempt to discuss the problem with the individual most directly involved in the grievance. In most cases, such a discussion will yield a mutually acceptable resolution.
2. If a discussion is impossible or unable to resolve the grievance, the student may then consult with an appropriate member of the administration, who may suggest possible solutions as appropriate or who may act as an informal mediator. If the problem is with a member of the faculty, the appropriate person for the student to consult is the dean of the faculty. If the problem is with another student, staff member, or administrator, the appropriate person for the student to consult is the dean of students. Other members of the Lawrence community from whom the student may wish to seek counsel include professional counseling staff or the student's faculty advisor, residence hall director, or residence life advisor.
3. If informal conversation fails to resolve a grievance, the student may request either the provost and dean of the faculty, the vice president for business affairs, or the dean of students, depending on the nature of the problem, to review the case formally. To call for such a formal review of a grievance against a student or a staff or faculty member, the complainant must send to the dean or vice president a written statement that explains the grievance and reviews the action taken to that point. The complainant may also include proposals for a solution of the grievance. The complainant must send a copy of this statement to the student or staff or faculty member against whom the grievance is alleged.

The vice president or dean then will request a written response to the statement from the other individual in the dispute. He or she may seek additional information and may meet with either or both parties. On the basis of the statement of the grievance, the response, and any additional information gathered by the dean or vice president, he or she may decide (1) that the respondent has acted responsibly and the complainant has been given an adequate explanation of the situation from which the grievance arose; (2) that there has been a violation of university regulations or procedures, in which case the dean or vice president will direct the party in violation of the regulations or procedures to correct the violation; or (3) that the situation is not specifically covered by university regulations or procedures. In the last case, he or she may offer a recommendation regarding appropriate action, but neither party is bound to act on the recommendation. The dean or vice president will send a written assessment of the grievance and recommendation for its resolution to the complainant and the respondent.

4. If the procedures do not result in a resolution of the grievance, the complainant may request that a panel of faculty and staff members be convened to hear the grievance and render a final decision. Upon receipt of such a request in writing, the dean or vice president will ask the complainant and the respondent to submit lists of up to three members of the faculty and staff. The dean or vice president will select one person from each of those lists and name a third member of the faculty or staff to chair the panel. The grievance panel will receive all written documents related to the grievance and may interview both the complainant and the respondent before rendering its decision, in writing, to the complainant, the respondent, and the dean. The complainant or respondent may appeal to the president to reverse the decision of the grievance panel. The decision of the president is final.

Admissions, Fees and Financial Aid

Admission

Admission to the university

Lawrence admits students who can profit from what the university has to offer and who will contribute to its academic and residential communities. We recommend that high school students take at least 16 academic units from the areas of English, mathematics, history, social studies, natural sciences, and foreign languages. We are interested in students who have challenged themselves in high school, who have performed well in their academic work, who express themselves well both verbally and in writing, who understand the value of a liberal arts education, and who are imaginative, energetic, and willing to become active members of a learning community.

Lawrence considers the strength of each applicant's course of study, grades, recommendations and extracurricular activities, roughly in that order. Lawrence will consider, but does not require, SAT or ACT scores for admission.

International students whose primary language is not English must submit the results of the ACT, SAT, IELTS (International English Language Testing System), or the TOEFL (Test of English as a Foreign Language).

Candidates for the Bachelor of Music degree and for the five-year double-degree program are evaluated additionally on musicianship, musical background, performance potential, and music teachers' recommendations. Along with the regular application forms, music degree applicants must submit a music resume and a recommendation from a private music teacher, and must audition on their primary instrument.

We welcome applications from transfer students who wish to complete their degree at Lawrence. Transfer candidates are required to submit college transcripts and a college faculty recommendation along with the application, secondary school report, and final high school transcript. Lawrence accepts, but does not require, SAT or ACT scores for transfer admission. Transfer candidates for the music degree must also submit a music resume and a recommendation from a music teacher, and must audition on their primary instrument. Generally, coursework in the arts and sciences completed satisfactorily at accredited institutions is accepted toward a Lawrence degree.

For information on residence requirements for each degree program please click here.

On occasion, Lawrence accepts qualified applicants for early admission who are prepared to begin college at the end of the junior year of high school.

Lawrence adheres to a need-blind admission policy.

Application deadlines and campus visits

There are three application deadlines for first-year students planning to enroll in September.
Early Decision: November 15
Early Action: December 1
Regular Decision: January 15

Admissions, Fees and Financial Aid

Early Decision should be elected only by those students who are confident that Lawrence is their first-choice college, as it is a binding decision. Early Decision candidates will be notified by December 1 and are required to make a commitment by January 1.

Early Action is not binding; candidates will be notified by early February, but are not required to make a commitment until May 1.

Regular Decision candidates will be notified of a decision by April 1 and are expected to reply by May 1.

Transfer admission is competitive and offered on a space-available basis.

Lawrence welcomes visits by prospective students, as a campus visit is the best way to learn about a college. We encourage students to visit when classes are in session and there is an abundance of campus activities. We can arrange class visits, individual meetings with faculty, meals in the dining hall, a campus tour, and an interview with an admissions officer. We ask that visits be arranged at least two weeks in advance and that students limit residence-hall overnights to one night. We provide overnight stays for high school seniors and transfer students visits on Sunday through Thursday nights. Summer visits consist of an interview and campus tour.

Tuition, Fees and Refunds

Admission and Matriculation Fees
$40: Fee payable with application by all applicants.

$200: Continuing enrollment deposit to ensure registration and housing for each term. Deposit payable by all admitted students on receiving notice of admission, on return from a leave of absence, or on readmission following a withdrawal. Refundable on graduation or on written notification of withdrawal or leave of absence prior to August 15 for Term I, December 15 for Term II, and March 15 for Term III. Refunds are reduced by any unpaid obligations to the university. Nonrefundable on withdrawal prior to matriculation or withdrawal or leave of absence without timely, proper notice after matriculation.

$20: Matriculation fee for initial enrollment.

Comprehensive Fee 2010-11
$36,042: Tuition per three-term year. Payable in installments of $12,014 each term.

$3,501: Double room charge per three-term year. Room charges for single occupancy are higher than double occupancy.

$3,906: Annual Board Plan ($1,302 per term) per three-term year.

$270: Student activity fee/Lawrence University Community Council fee for three-term year. Payable in installments of $90 per term.

$43,719: Total comprehensive fee, per three-term year. Includes tuition, double room, board, and activity fee.

The equivalent of at least 12 terms (216 units) of tuition, less transfer or advanced-placement credit, must be paid by single-degree students prior to the awarding of the degree. Double-degree students must pay the equivalent of at least 15 terms (270 units) of tuition.

Incremental Fees
Students enrolled and assessed according to the comprehensive fee schedule for the full 12 terms may take courses above the normal course load in any of those terms at no extra cost. Students enrolled full-time for more than 12 terms may elect tuition assessment by-the-term or by-the-course for the 13th and succeeding terms.

Students choosing to take more or less than the normal course load and choosing to pay the regular comprehensive fee will contract for at least 12 terms (216 units) of tuition payments (15 terms, 270 units for students in the double-degree program), less the equivalent in transfer or advanced-placement credits, prior to the awarding of the degree. Units per term of between 17 and 19 are the norm. Per-credit payment terms are available. Financial aid will be adjusted accordingly for per-credit payment.

Other Fees and Costs
$150-275: Textbook cost per term, approximate

$30: Residence hall activity fee per three-term year.

$275: Music lesson charge per term, one-half hour of instruction per week, for students not majoring in music.

A 12-annual-percentage-rate late charge will be assessed on all accounts 30 days past due.

A $20 miscellaneous charge; some charges are billed directly to students by the departments. If not paid in a timely manner, such charges are added to the student's account with a non-refundable miscellaneous-charge fee. This would include overdue library items and computer mini-hubs.

Note: Medical insurance is not provided for students by the university. A student insurance plan offering accident and sickness coverage is available through a local agent. Details may be obtained from the Office of the Dean of Students.

Room and Board
Lawrence University is a residential college, and all students are expected to live on campus throughout their entire enrollment. Exemptions are granted to students who have been Lawrence students for four academic years, students beginning their fifth year or later after high school, married students, students in documented domestic partnerships or students with dependent children. Students meeting any of these criteria should submit a written request for a housing exemption to the vice president for student affairs and dean of students. Housing charges will be cancelled only after reasons are verified. Students must keep the registrar's office informed of any address or telephone number changes.

Room charges are: double occupancy, $3,501 per three-term year, single occupancy, $4,173 per three-term year. Changes of occupancy will be reflected on the student account as they occur. Residence hall rooms are provided with essential furniture; students must provide their own linens.

Board plans do not vary in price, only in the balance between meals per term and declining balance monies on the meal card. Students choose the plan that best meets their individual needs and schedules. All students are required to eat their meals in campus dining facilities.

Residence halls open for new students on the day prior to the first day of Welcome Week. Rooms for returning students will be available on the Sunday prior to registration. The first board meal is served on that Sunday evening.

The obligations of the university to resident students for room and board cease after breakfast on the day following the last examination at the end of each term or after the last class before each vacation period within a term. In the third term, a 24-hour period after the individual student's last examination is allowed for packing.

The room and board charge does not include the winter break, or any other period when dining halls or residences are closed. Residence halls will remain available during spring break but the regular board options will not be available. Retail dining options are available in the Warch Campus Center on a reduced operating schedule during breaks.

Memorial Hall will be open limited hours during breaks.

Bills and Payments

Bills are available through the student's Voyager account approximately three weeks before they are due for each term. The bill reflects appropriate adjustments for merit awards and financial aid awards based upon receipt of a signed Lawrence financial aid awards that have been accepted by a student. Due dates will not be extended. The student is responsible for obtaining their billing information from Voyager.

Students will not be allowed to complete registration or continue attending classes until term fees have been paid in full or a payment arrangement has been approved by the financial service office. Once satisfactory payment arrangements have been made, a conditional registration is signed by Financial Services and the student, specifying that the account will be paid no later than the sixth week of that term.

The student will be informed periodically of the status of the account and notified promptly if the terms of the conditional registration are not being met. Students who do not pay their fees as agreed will be put on administrative leave for the next term and will not be allowed to return until the following term, when all outstanding fees must be paid in full, along with the payment for the upcoming term. Failure to make payment for subsequent terms by the due dates, after being reinstated as a student, will result in an indefinite leave.

Additional charges incurred for course-related or extracurricular activities or purchases are due as incurred. Students are expected to pay these obligations when due.

Official transcripts, diplomas, and letters certifying completion of requirements or receipt of a degree will not be released and verbal confirmation of a degree will not be given until all accumulated fees and charges have been paid.

Term I fees are due on August 15, 2010. Term II fees are due December 15, 2010. Term III fees are due March 15, 2011.

Refunds
In 1999 Lawrence adopted a refund policy in accordance with the U.S. Department of Education's 1998 Reauthorization of The Higher Education Amendments (Section 668.22).

Leave of absence or withdrawal before the first day of classes
Full room, board, tuition, and activity fees will be refunded upon proper notification of withdrawal or leave of absence prior to the first day of classes for any term. Written notification of leave of absence or withdrawal must be directed to the dean of student academic services. A student who remains on campus after the approved leave of absence or withdrawal date will be charged pro rata for room and board through the date on which they depart, as determined by the dean of students.

Students who fail to notify the university of their decision not to enroll for classes by the date fees for the term are due (see Bills and Payments, above) will forfeit their continuing enrollment deposit (CED) of $200.

Leave of absence or withdrawal on or after the first day of classes
Students who take a leave of absence or withdraw from the university after classes are in session may qualify for a reduction in certain charges that are due to the university.

A student must request a change in status, including a leave of absence or withdrawal from the dean of student academic services. Students who wish to request this change, or discuss such an option, should make an appointment with the dean of student academic services before completing the required form. If granted permission for a change of status, a student may qualify for a reduction in charges that are due the university.

If a student takes a leave of absence or withdraws prior to or at the 60-percent point of the term, tuition, room, and board charges will be based on the number of calendar days the student was in attendance. A student who remains on campus after the approved leave of absence or withdrawal date will be charged pro rata for room and board through the date on which they depart, as determined by the dean of students.

Computation of the 60-percent point will be based on the total number of calendar days in the term beginning with the first day of classes and ending with the last day of final examinations. For the 2009-10 academic year, these dates are:

- Term I October 27, 2010
- Term II February 14, 2011
- Term III May 11, 2011

A non-refundable $200 withdrawal fee will be assessed each time a student withdraws or takes a leave of absence from the university, unless the leave of absence or withdrawal is before the first day of classes of each term.

Federal, state, institutional, and private financial aid funds (except for earned federal work study funds) awarded to the student will be reduced based on the number of calendar days the student was in attendance up to the 60-percent point of the term. After 60 percent of the term has been completed, financial aid awards will not be adjusted. Further details and examples can be obtained at the financial aid office.

Refund checks will not be issued until two weeks after either the last date of attendance or the student's departure date, whichever is later.

Financial aid

Lawrence awards a variety of merit scholarships based upon demonstrated academic, extracurricular and musical talent, and achievement. The bulk of Lawrence's financial assistance, however, is reserved for those students who have demonstrated financial need.

Students are eligible for consideration for financial aid from Lawrence funds, federal aid programs and state aid programs. More than 90 percent of our students receive more than $30 million in financial aid each year in the form of grants and scholarships, loans, and work-study funds. Lawrence subscribes to institutional methodology in determining eligibility for financial aid.

First year students must submit the Free Application for Federal Student Aid (FAFSA) and the Lawrence Application for Financial Aid, as well as signed copies of federal income tax returns, including W-2 forms, for both the parent(s) and student, where applicable. If the student's parents are divorced or separated, a non-custodial financial aid form is required from the non-custodial parent. Final determination of financial need is made after a student has been offered admission and upon receipt of all financial aid documents as described above. The recommended financial aid application deadline for first-year students is March 15.

Lawrence's financial aid commitment will continue throughout a student's career at Lawrence for as long as the family demonstrates financial need and the student is making satisfactory progress toward the completion of a degree. Merit scholarships are reviewed annually for renewal; students must meet specifically stated criteria for continued eligibility of merit scholarships.

The largest single source of aid funds for Lawrence students is the Lawrence University Grant program. This resource comes from endowment income and annual contributions from alumni and friends of the university.

Loan options available to eligible students and parents include the Federal Direct Stafford Student Loan, the Federal Perkins Loan, and the Federal PLUS parent loan, as well as private sources.

Returning students are sent information in February explaining how to apply for financial aid for the following academic year. The priority deadline for returning students to apply for financial aid is April 1. Exit interviews are required for all student recipients of federal loans prior to leaving the university.

Approximately half of the student body works part-time on campus as part of the student employment program. Campus employment allows students to earn money to pay for a portion of their college expenses.

Applicants are encouraged to apply for any local scholarships for which they may be eligible. Lawrence is need-blind in its admission policy and, therefore, does not consider financial need in evaluating a student's admissibility to the university.

Awards, Societies and Fellowships

Awards and Prizes

A variety of awards and prizes are made to students and faculty members at the annual Honors Convocation in the spring, including:

The John J. and Graciela Alfieri Tuition Scholarship in Spanish
The Mrs. H. K. Babcock Award, for service to students
The Paul V. Bacon Prize in Latin
The Louis C. Baker Memorial Award in Modern Languages
The Baker Prize in Modern Languages
The Ruth Bateman Award, for excellence in scholarship, athletic ability, and leadership by a woman
The Andrew C. Berry-James C. Stewart Prize in Mathematics
J. Bruce Brackenridge Prize in Physics
The Philip and Rosemary Wiley Bradley Achievement Scholarship in Economics
The Campus Life Award, for leadership and service
The Iden Charles Champion Award in Commerce and Industry, to a student in the Department of Economics
The Iden Charles Champion Cup, for excellence in scholarship, athletic ability, college spirit, and loyalty
The Undergraduate Award in Analytical Chemistry
The POLYED Organic Chemistry Award
The Senior Chemistry Award
The CRC Press Freshman Chemistry Achievement Award
The F. Theodore Cloak Award in Theatre
The Sophomore Prize in Computer Science
The Maurice P. and Regina C. Cunningham Prize in Greek
The Maurice Cunningham Phi Beta Kappa Prize, to an outstanding junior
The Margaret Gary Daniels Keyboard Performance Award
The Diderrich Prize in Creative Writing
The Clyde Duncan Scholarship
The Miriam Clapp Duncan Award in Organ and Harpsichord
The Herman Erb Prize in German
The John Herbert and Mamie E. Farley Prize Scholarship in Philosophy
The Fraternity Scholarship Cup
The Outstanding Freshman Athletic Award for Men
The Outstanding Freshman Athletic Award for Women
The Freshman Studies Teaching Award
The Freshman Studies Writing Prize
The Christine Gerdes Award in Anthropology
The Judith Anne Gustafson Memorial Award, for outstanding scholarship and character
The Richard A. Harrison Award for Research in the Humanities and Social Sciences
The Hicks Prize in Fiction
The Hicks Prize in Poetry
The Paul C. Hollinger Award in Music History
The Joseph A. Hopfensperger Björklunden Scholarships
The Betty Champion Hustace Award in Art History
The Marjory Irvin Prize, for excellence in piano performance
The Anne Prioleau Jones Tuition Scholarship in French
The Ralph V. Landis Award, for outstanding contributions to Lawrence athletics by a male athlete
The Lantern Community Service Award
The Latin League of Wisconsin College Awards

Awards, Societies and Fellowships

The Charles F. Lauter International Student Prize, awarded for scholarship, leadership, service, and support for the international community at Lawrence
The Letterwinner Award, for outstanding athletic participation
The La Vahn Maesch Prize Scholarship in Organ
The Jessie Mae Pate McConagha Prize, for scholarship in history
The William A. McConagha Prize, for excellence in economics
The John F. McMahon Tuition Scholarship in German
The Elizabeth Black Miller String Scholarships
The James Ming Scholarship in musical composition
The Mortar Board Honorary Award, for faculty excellence
The Edwin H. Olson Award in Human Services
The Peabody Prize in Latin
The Phi Beta Kappa Freshman Scholarship Prize
The Pi Kappa Lambda Composition Award
The Pi Kappa Lambda Jazz Composition Award
The Pi Kappa Lambda Freshman Prize
The Pi Kappa Lambda Music Education Teaching Award
The Political Science Journal Award
The Charles E. Pond Award for Men
The Pond Athletic Award for Women
The Mojmir Povolny Prize in Government
The Presser Foundation Music Scholarship
The E. Dane Purdo Award, to an exceptional student in art or ceramics
The William F. Raney Prize in History
The Marion Read Award, for outstanding contributions to Lawrence athletics
The Gervais E. and Mary Katherine Reed Award, for achievement and service, to a senior woman
The Theodore L. Rehl Prize, for excellence in the performance of chamber music
The Alexander J. Reid Prize in English
The Estelle Ray Reid Scholarship in Art
The Estelle Ray Reid Prize in Library Science
The Thomas B. Reid Scholarship in Journalism
The Elizabeth Richardson Award, for outstanding women majoring in studio art and art history
The Sumner Richman Student Research Award in Biology
The Patricia Ritter Prize in Chinese Culture
The Patricia Ritter Prize in Chinese Language
The Debbie Roman Prize in Chemistry
The Howard and Helen Russell Award for Excellence in Biological Research
The Louis Henry Schutte Memorial Prize in English
The William M. Schutte Grant for Student Summer Research
The John H. Scidmore Memorial Award, for scholarship, service, and devotion to senior classmates
The Senior Art Prize for Men
The Sophomore Prize in Computer Science
The Sorority Scholarship Cup
The Warren Hurst Stevens Prize Scholarship, for scholarship and useful activity in university affairs by a junior man
The Tank-Palmquist-Ross Award in Geology
The Jean Wiley Thickens Prize, in science education
The Tichenor Prize in English
The E. Graham Waring Prize in Religious Studies

Awards, Societies and Fellowships

The Edwin N. and Ruth Z. West Scholarship, for scholarship and leadership
The Ralph White Prize in Mathematics
The Alexander Wiley Prize, for principled independence of thought, moral courage, and creative commitment to a significant cause
The Charlotte Wood Prize in English
The Henry Merritt Wriston Scholarship Award

ACADEMIC HONORARY SOCIETIES
The Lawrence chapter of Phi Beta Kappa elects as members senior students who have demonstrated superior scholarship. The society also sponsors lectures and awards scholastic honors for academic performance in the freshman and junior years. Pi Kappa Lambda is the highest honor for Conservatory of Music students, recognizing exceptional musical and scholastic ability.

Mortar Board, a national honor society for senior men and women, elects members at the end of their junior year on the basis of outstanding leadership, scholarship, and service to the academic community.

Lambda Sigma, a national honorary society for sophomore men and women, fosters leadership, scholarship, fellowship, and the spirit of service among college students. Departmental honorary societies include Lambda Alpha, anthropology; Phi Sigma, biology; Eta Sigma Phi, classics; and Psi Chi, psychology.

Departmental honorary societies include Phi Sigma, biology; Eta Sigma Phi, classics; and Psi Chi, psychology.

FELLOWSHIPS
Many fellowships and other sources of financial aid are available for graduate study. The Career Center library contains several comprehensive directories of financial aid for graduate and specialized study as well as more detailed information on specific fellowships. Students also should visit the Fellowships and Scholarships for Students Web page, consult with department chairs about fellowships in their fields, and check departmental bulletin boards on which fellowship notices are posted.

Lawrence students regularly compete for the following major fellowships.

Fulbright Grants
The Fulbright Program makes grants to U.S. citizens and nationals of other countries for

Gates Cambridge Trust
P. Boleyn-Fitzgerald
The Trust provides full-cost scholarships for graduate study at the University of Cambridge. Candidates must have demonstrated academic achievement, be admissible to Cambridge, and be committed to “use the benefits of higher education for the common good.”

Awards, Societies and Fellowships

Goldwater Scholarships
M. Blackwell
The Barry M. Goldwater Scholarships seek to foster and encourage excellence in science and mathematics. Sophomores and juniors who are planning careers in math or science may apply for one or two years of support and for consideration for graduate school support.

Marshall Scholarships
P. Boleyn-Fitzgerald
The Marshall Scholarship Program enables U.S. citizens who are graduates of U.S. colleges and universities to study for a degree from a university in the United Kingdom for a period of at least two academic years in any subject.

National Science Foundation Graduate Fellowships
J. Brandenberger
Three-year $15,000 plus tuition-waiver fellowships are awarded for study and research leading to master's or doctoral degrees in the mathematical, physical, biological, engineering, and behavioral and social sciences, including the history of science and philosophy of science, and to research-based Ph.D. degrees in science education.

National Security Education
N. Wall
Program (graduate)
NSEP Graduate International Fellowships support graduate study in foreign languages and area studies of regions critical to U.S. national security. Study concerning 60 countries and 30 languages receives three years of support at $4,000 a year and $20,000 a year for an overseas component.

National Security Education Program (undergraduate)
NSEP focuses on geographical areas, languages, and fields of study deemed critical to U.S. national security. Grants of up to $8,000 are available for study in any of 50 countries.

Rhodes Scholarships
B. Pourciau
The will of Cecil Rhodes provides funds for up to 32 unmarried U.S. citizens selected annually to study for a degree at Oxford University. These highly competitive awards are given for two or three years.

Rotary Graduate Fellowships
N. Wall
The Rotary Foundation awards graduate scholarships to allow men and women to complete one academic year of study in another country where Rotary Clubs are located.

Truman Scholarships
S. Purkey
The Harry S. Truman Scholarship Foundation makes awards to college juniors who have demonstrated interest in and outstanding potential for leadership in public service. This grant covers expenses of up to $30,000 over four years, including three years of graduate school.

Awards, Societies and Fellowships

Udall Scholarships
B. De Stasio
The Morris K. Udall Scholarship provides funding for undergraduate work in environmental studies or Native American studies. The maximum stipend is $5,000, and college sophomores or juniors may apply.

Watson Fellowships
T. Spurgin
Grants of $22,000 ($31,000 if the student is married) are awarded by the Thomas J. Watson Foundation for “a focused and disciplined Wanderjahr of the student’s own devising.” Lawrence nominates four students each year.

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Robert C. Buchanan '62
Retired

Michael P. Cisler '78

John H. Ellerman '58
Retired

Susan Feith
Vice Chair, Mead Witter Foundation, Inc.

J. Terrence Franke '68
Senior Consultant, Productive Strategies, Inc.

William O. Hochkammer '66
Attorney/Partner Honigman Miller Schwartz and Cohn, LLP

Catheryn E. Hoehn '64
Counseling Consultant, Troy High School

Susan Stillman Kane '72
Community Volunteer

Thomas C. Kayser '58
Attorney/Partner
Robins, Kaplan, Miller & Ciresi L.L.P.

David N. Knapp '89
Senior Vice President & Managing Director
The Northern Trust Company

Harry M. Jansen Kraemer, Jr. '77
Executive Partner, Madison Dearborn Partners, LLC

Lewis C. Lofgren
Chief Executive Officer, ADE, Inc.

Cory L. Nettles '92
Managing Director Generation Growth Capital, Inc.

DIRECTORY

Overton B. Parrish, Jr. ’55
President and Chief Executive Officer,
Phoenix Health Care, Inc.

Robert F. Perille ’80
Managing Director, Shamrock Capital
Advisors

Dwight A. Peterson ’55
Retired Vice President and Treasurer
3M Company

Jeffrey D. Riester ’70
Attorney, Manager Appleton Office
Godfrey & Kahn, S.C.

Charles D. Saunders ’84
Partner and Sr. Portfolio Manager
NorthRoad Capital Management LLC

Robert J. Schaupp ’51
President, P & S Investment Company,
Inc.

Dale R. Schuh ’70
Chairman of the Board, CEO and
President Sentry Insurance

Charlot Nelson Singleton ’67
Educator, Menlo Park City School
District

Margy Upton Trumbull ’72
Artist/Arts Advocate

Stephanie H. Vrabec ’80
Science Teacher, Xavier High School

DIRECTORY

Faculty

Minoo Adenwalla (1959)
Professor Emeritus of Government
University of Bombay, B.A.; Northwestern University, M.S., Ph.D.
Interest(s): South Asian and British politics, political philosophy

I Dewa K.A. Adnyana (2009)
Lecturer of Music
Conservatory of Indonesian Musical Arts (Sekolah Menengah Karawitan Indonesia), Batubulan, Bali, Indonesia
Interest(s): Traditional and contemporary Balinese music and dance

Madera Allan (2008)
Assistant Professor of Spanish
Reed College, B.A.; University of Pennsylvania, M.A.
Interest(s): Medieval and early modern Spanish cultural production, literary theory, ethics

Matthew E. Ansfield (2000)
Associate Professor of Psychology
University of Wisconsin-Madison, B.S.; University of Virginia, Ph.D.
Interest(s): social psychology

Janet Anthony (1984)
Professor of Music and Teacher of Cello
University of Arizona, B.Mus.; Hochschule für Musik und Darstellende Kunst, Vienna; State University of New York at Stony Brook, M.Mus.
Interest(s): cello, music history, chamber music

Jeremy P. Bakken (2010)
Visiting Assistant Professor of Psychology
Lawrence University, B.A.; University of Wisconsin-Madison, M.S., Ph.D.
Interest(s): Adolescent parent-child and peer relationships, autonomy development, peer influence, cultural contributions to developmental processes

Ameya S. Balsekar (2009)
Assistant Professor of Government
Brown University, B.A.; Cornell University, M.A., Ph.D.
Interest(s): Political participation, identity politics and ethnic conflict, politics of Asia, comparative democratization, politics of human rights, multiculturalism

Faith Barrett (2003)
Associate Professor of English
Swarthmore College, B.A.; University of Iowa M.F.A.; University of California-Berkeley, M.A., Ph.D.
Interest(s): 19th-century American literature, early American literature, poetry, creative writing

Philip A. Baruth (2003)
Lecturer of Music
Lawrence University, B.A.
Interest: guitar

Robert Beck (2001)
Visiting Professor of Education
Lawrence University, B.A.
Interest(s): guitar

David E. Becker (2004)
Professor of Music and Director of Orchestral Studies
University of Chicago, B.A., M.A., Ph.D.
Interest(s): information technology in teacher education and K-12 education

David Bell (2005)
Associate Professor of Music
Oberlin College, B.Mus.; Northwestern University, M.Mus.
Interest(s): Marathon running

John H. Benson (1997)
Instructor of Music
University of Minnesota, B.S.; University of Wisconsin-Madison, B.Mus.; University of Washington, M.Mus.
Interest(s): theory, composition

DIRECTORY

Kerry L. Bieneman (2010)
Lecturer of Music

Gene Biringer (1995)
Associate Professor of Music
Rutgers University, B.A.; University of Illinois, M.Mus.; Yale University, M.Phil., Ph.D.
Interest(s): music theory, composition, music history

Marcia Bjørnerud (1995)
Professor of Geology and Walter Schober Professor of Environmental Studies
University of Minnesota-Minneapolis, B.S.; University of Wisconsin-Madison, M.S., Ph.D.
Interest(s): structural geology, tectonics, rock mechanics, earth history

Mary Blackwell (1989)
Associate Professor of Chemistry
University of Illinois-Urbana, B.A.; University of California-Berkeley, Ph.D.
Interest(s): photosynthesis electron transport, self-organization, biophysics and the mathematical description of biological phenomena, enzyme kinetics, and other nonlinear processes

Peter A. Blitstein (2001)
Associate Professor of History
Johns Hopkins University, B.A.; University of California-Berkeley, M.A., Ph.D.
Interest(s): History of the Russian Empire and the Soviet Union, Nationalism and Ethnicity, Historical Theory

Ann Kohlbeck Boeckman (1992)
Instructor of Music and Teacher of Music Fundamentals
Lawrence University, B.Mus.; Western Illinois University, M.A.
Interest(s): music theory, piano, early childhood education

Patrick A. Boleyn-Fitzgerald (2001)
Associate Professor of Philosophy and Edward F. Mielke Professor of Ethics in Medicine, Science and Society
Miami University, B.A.; University of Arizona, M.A., Ph.D.; Oxford University, M.Phil.
Interest(s): biomedical ethics

Austin J. Boncher (2010)
Lecturer of Music
Lawrence University, B.Mus.; Indiana University Bloomington, M.Mus.Ed.

Garth Bond (2004)
Assistant Professor of English
Trinity University, B.A.; University of Chicago, M.A., Ph. D.
Interest(s): Renaissance literature, poetry and drama, manuscript studies, history of the book, film

Helen Boyd Kramer (2008)
Lecturer of Gender and Freshman Studies
City College of New York, B.A., M.A.
Interest(s): transgender issues

Joanne H. Bozeman (1993)
Instructor of Music
University of Arizona, Tucson, B.Mus.
Interest(s): voice, singing diction, vocal technique and pedagogy

Kenneth W. Bozeman (1977)
Frank C. Shattuck Professor of Music and Teacher of Voice
Baylor University, B.Mus.; University of Arizona, M.Mus.; Hochschule für Musik, Munich
Interest(s): voice, voice science and pedagogy

John R. Brandenberger (1968-2008)
Alice G. Chapman Professor Emeritus of Physics
Carleton College, B.A.; Brown University, Sc.M., Ph.D.

DIRECTORY

Jason Brozek (2008)
Assistant Professor of Government and Stephen Edward Scarff Professor of International Affairs
Wayne State College, B.A.; University of Wisconsin-Madison, M.A., Ph.D.
Interest(s): Freshwater, international security, conflict bargaining, US foreign policy, International law

Nell Jorgensen Buchman (1994)
Teacher of Piano and Lecturer of Music
Meredith College, B. Mus; University of Oklahoma, M.M.
Interest(s): piano

David Burrows (2005)
Provost and Dean of the Faculty
Columbia University, B.A.; University of Toronto, M.A., Ph.D.
Interest(s): cognitive psychology

Elizabeth Carlson (2006)
Assistant Professor of Art History
University of Cincinnati, B.A.; University of Minnesota, M.A., Ph.D.
Interest(s): 19th and 20th century European and American art history and visual culture

Kelley K. Carpenter
Lecturer of Music and Teacher of Saxophone and Saxophone Quartet Coach

Karen L. Carr (1987)
Professor of Religious Studies
Oberlin College, B.A.; Stanford University, Ph.D.
Interest(s): 19th- and 20th-century religious thought, philosophy of religion, comparative religion

Sara Gross Ceballos (2008)
Visiting Assistant Professor of Music
Colby College, B.A.; University of California, M.A., Ph.D.
Interest(s): musicology

William A. Chaney (1952)
George McKendree Steele Professor Emeritus of History
University of California, Berkeley, B.A., Ph.D.; Society of Fellows, Harvard University
Interest(s): the Middle Ages, ancient history

Bin Chao (2010)
Lecturer of Music

Dominica Chang (2007)
Assistant Professor of French
University of Wisconsin-Madison, B.A.; Middlebury College, M.A.; University of Michigan-Ann Arbor, M.A., Ph.D.
Interest(s): Romance languages and literature

Kin Chau (2008)
Lecturer of Music and Teacher of Viola and Violin
University of Southern California, B.Mus.; Yale University, M.Mus.
Interests: Violin, Viola, String Technique, Violin and Viola Ensembles

Jeffrey J. Clark (1998)
Associate Professor of Geology
Middlebury College, B.A.; Johns Hopkins University, Ph.D.
Interest(s): geomorphology, earth surface processes, human influences on the environment

Adam Clausen (2007)
Visiting Assistant Professor of Physics
University of Puget Sound, B.S.; University of Oregon, Ph.D.
Interest(s): mathematical physics, general relativity

Edward Clemons (2002)
Instructor of Mathemathics
University of Wisconsin-Platteville, B.S.; University of Wisconsin-Oshkosh, M.S.
Interest(s): statistics

Craig Edward Clifford (2010)
Lecturer of Art

DIRECTORY

Paul M. Cohen (1985)
Professor of History and Patricia Hamar Boldt Professor of Liberal Studies
Clark University, B.A.; University of Chicago, M.A., Ph.D.
Interest(s): modern European intellectual history

Jeffrey A. Collett (1995)
Associate Professor of Physics
St. Olaf College, B.A.; Harvard University, A.M., Ph.D.
Interest(s): condensed matter physics, x-ray scattering, phase transitions, and critical phenomena

Scott Corry (2007)
Assistant Professor of Mathematics
Reed College, B.A.; University of Pennsylvania, Ph.D.
Interest(s): Number theory and algebraic geometry

John Daniel (2002)
Associate Professor of Music and Teacher of Trumpet
Ball State University, B.Mus.; University of Iowa, M.A.; University of Michigan
Interest(s): trumpet

Victoria Daniel (2003)
Lecturer of Music
University of Iowa, B.Mus.; Texas Tech University, M.Mus.
Interest(s): percussion

Patricia A. Darling (2007)
Lecturer of Music
Lawrence University, B.Mus.
Interest(s): jazz, composition

Carla Daughtry (2000)
Associate Professor of Anthropology
Mount Holyoke College, B.A.; Universityof Michigan, M.A., Ph.D.
Interest(s): Africa, North Africa, and the Middle East; diasporic, transnational, and urban refugee communities; ethnic and gender issues; fieldwork methodology; personal narrative research

Bart T. De Stasio (1992)
Professor of Biology
Lawrence University, B.A.; University of Rhode Island; Cornell University, Ph.D.
Interest(s): evolutionary ecology, aquatic biology, predator-prey interactions

Elizabeth Ann De Stasio (1988-89; 1992)
Professor of Biology and Raymond H. Herzog Professor of Science
Lawrence University, B.A.; Brown University, Ph.D.
Interest(s): interactions of biological molecules, evolution

James H. DeCorsey (1990)
Associate Professor of Music and Teacher of French Horn
Stanford University, B.A.; Yale University, M.A., M.M.A., D.M.A.
Interest(s): horn, chamber music, music history

Tyson Deaton (2010)
Lecturer of Music

Stefan Debbert (2007)
Assistant Professor of Chemistry
University of Minnesota-Twin Cities, B.S.; Cornell University, Ph.D.
Interest(s): Organic and organometallic chemistry, synthesis, medicinal chemistry

Cecile C. Despres-Berry (2002)
Lecturer in English as a Second Language and Director of the Waseda Program
Earlham College, B.A.; University of Texas at Austin, M.A.
Interest(s): second language writing

Donna Jeanne DiBella (1996)
Instructor of Music
Rutgers University, B.A.; Westminister Choir College; Suzuki Institute, University of Maine-Orono
Interest(s): theory, sight-singing, organ

DIRECTORY

Kimberly Dickson (2007)
Assistant Professor of Chemistry
Smith College, B.A.; Johns Hopkins University. M.S.; University of Wisconsin-Madison, Ph.D.
Interest(s): protein structure and function

David Dies (2009)
Instructor of Music
Bemidji State, B.A.; Crane School of Music, M.Mus.; University of Wisconsin-Madison, D.Mus.A.
Interest(s): 20th/21st century music, with a focus on American and 'Spiritual' Minimalism, Chamber Music, Vocal Music

Mark L. Dintenfass (1968-2006)
Professor Emeritus of English
Columbia University, B.A., M.A.; University of Iowa, M.F.A.
Interest(s): prose fiction, American literature, composition

Sonja L. Downing (2008)
Lawrence Postdoctoral Fellow of Ethnomusicology
Swarthmore College, B.A.; University of California-Santa Barbara, M.M., Ph.D.
Interest(s): ethnomusicology, gender studies, traditional Balinese music

John P. Dreher (1963)
Lee Claflin-Robert S. Ingraham Professor of Philosophy
St. Peter's College, B.A.; Fordham University, M.A.; University of Cologne; University of Chicago, Ph.D.
Interest(s): history of philosophy, environmental ethics, American pragmatism

Cindy Duckert (2010)
Lecturer of Biology
California Institute of Technology, Engineering
Interest(s): Science communication

Dale L. Duesing (1992)
Artist-in-Residence
Lawrence University, B.Mus.; Hochschule für Musik, Munich, Artist Diploma
Interest(s): voice, opera

John B. Eckstein (2010)
Visiting Associate Professor of Music

Sara Emerson (2010)
Visiting Assistant Professor of Biology
Humboldt State University, B.A.; University of Illinois at Chicago, B.S., Ph.D.
Interest(s): Foraging ecology of mammals, primate behavior

Marty Erickson (2002)
Lecturer of Music and Teacher of Tuba
Michigan State University
Interest(s): tuba, chamber music

James S. Evans (1966)
Professor of Computer Science and Chemistry
Bates College, B.A.; Princeton University, M.A., Ph.D.
Interest(s): structure and interactions of proteins, computer architecture and organization

Gustavo C. Fares (2000)
Professor of Spanish
Collegio Nacional de Buenos Aires, B.A.; Universidad de Buenos Aires, J.D.; West Virginia University, M.A., M.F.A.; University of Pittsburgh, Ph.D.
Interest(s): Argentinian literature, Latin American art

Merton D. Finkler (1979)
Professor of Economics and John R. Kimberly Distinguished Professor in the American Economic System
University of California-San Diego, B.A.; London School of Economics, M.Sc.; University of Minnesota, Ph.D.
Interest(s): public finance, macroeconomic policy

DIRECTORY

Jake Frederick (2006)
Assistant Professor of History
University of Massachusetts-Amhurst, B.A; Pennsylvania State University, Ph.D.
Interest(s): Mexican history, Afro-Latino history, environmental history

Dorrit F. Friedlander (1951-93)
Professor Emerita of German
All Saints Episcopal College, University of Cincinnati, B.A., M.A.; University of Heidelberg

Richmond Frielund (1979-84; 1985)
Associate Professor of Theatre Arts
University of Minnesota, B.A.; University of Wisconsin-Superior, M.A.; University of Michigan, M.F.A.
Interest(s): design and technical theatre

Kathleen F. Fuchs (1985)
Director of Counseling Services and Adjunct Associate Professor of Psychology
Barat College, B.S.; Saint Louis University, M.S., Ph.D.
Interest(s): cognitive-behavioral psychotherapy, college student development, anxiety disorders

Geoff C. Gajewski (1988)
Associate Dean of Faculty for Student Academic Services
University of Wisconsin-Madison, B.A.; University of Wisconsin-Milwaukee, M.A.
Interest(s): writing, Freshman Studies

Adam Galambos (2006)
Assistant Professor of Economics
University of Northern Iowa, B.A.; University of Minnesota, M.S., Ph.D.
Interest(s): microeconomic theory, game theory, social-change theory

Alexandra Galambos (2010)
Lecturer of Linguistics

John T. Gates (2006)
Visiting Assistant Professor of Music and Teacher of Voice
University of South Carolina, B. Mus, M.Mus.; Florida State University, D.M.
Interest(s): voice

Samantha George (2008)
Associate Professor of Music and Teacher of Violin
Eastman School of Music, B.Mus., M.Mus., Performer's Certificate; University of Connecticut, D.Mus.A.
Interests: Violin, chamber music, orchestral excerpts

David Gerard (2009)
Associate Professor of Economics
Grinnell College, B.A.; University of Illinois, M.S., Ph.D.
Interest(s): New Institutional Economics, Energy and the Environment, Political Economy, Regulatory Policy

Peter J. Gilbert (1990)
Director of the Seeley G. Mudd Library and Associate Professor
Carleton College, B.A.; University of Wisconsin-Madison, M.A.
Interest(s): reference, networked information resources, American library history

Peter S. Glick (1985)
Professor of Psychology and Henry Merritt Wriston Professor of the Social Sciences
Oberlin College, A.B.; University of Minnesota, Ph.D.
Interest(s): stereotyping, discrimination, prejudice

Terry L. Gottfried (1986)
Professor of Psychology and Director of Freshman Studies
University of Minnesota, B.A., Ph.D.
Interest(s): perception of speech and singing, psychology of cognition and perception

DIRECTORY

Joseph N. Gregg (1991)
Associate Professor of Mathematics
Texas A&M University, B.S., M.S.;
Princeton University, Ph.D.
Interest(s): architecture of large software systems, software for math education, complex systems

Geraldine O. Grine (2009)
Lecturer of Music

Wen-Lei Gu (2006)
Assistant Professor of Music
The Juilliard School, B.Mus.; Mannes College of Music, M. Mus.; Indiana University School of Music, D.Mus.
Interest(s): violin, piano, foreign languages, literature

Alison C. Guenther-Pal (2007)
Visiting Assistant Professor of German
University of California-Santa Cruz, B.A.;
University of Minnesota, M.A., Ph.D.
Interest(s): feminist theory and pedagogies, German cinema, film theory

Chong-do Hah (1961)
Professor Emeritus of Government
Indiana University, B.A., Ph.D.; University of Virginia, M.A
Interest(s): East Asian politics, political and economic development

Beth Ann Haines (1992)
Associate Professor of Psychology
University of Wisconsin-Milwaukee, B.S.;
University of Wisconsin-Madison, M.S., Ph.D.
Interest(s): cognitive development, problem-solving, social development, learning styles

David J. Hall (2002)
Associate Professor of Chemistry
Butler University, B.S.; University of Wisconsin-Madison, Ph.D.
Interest(s): mechanisms by which rhinovirus activation of immune cells leads to the exacerbation of asthma

Kathrine Handford (2004)
Lecturer of Music and University Organist
Concordia College, B.A.; University of Wisconsin-Eau Claire, B.Mus.; Eastman School of Music, M.Mus., D.M.A.
Interest(s): organ

Nathan Hanna (2008)
Uihlein Fellow of Ethics
University of Florida, B.S.; Syracuse University, Ph.D.
Interest(s): Ethics and political philosophy

James R. Heiks (2010)
Lecturer of Music

David Helvering (2003)
Visiting Assistant Professor of
Music Arkansas State University, B.M.E.;
Sam Houston State University, M.Mus.;
University of Iowa Interest(s): music theory

Cecilia Herrera (2009) Instructor of Spanish Universidad de Playa Ancha, Chile, B.A., M.A. Interest(s): Latin American literature, Spanish civilizations and culture

Bruce E. Hetzler (1976) Professor of Psychology DePauw University, B.A.;
Northwestern University, M.A.,
Ph.D. Interest(s): neuropharmacology, effects of alcohol on the brain, computer analysis of brain waves

Lori Michelle Hilt (2008)
Lecturer of Psychology

William Hixon (2000, 2003) Associate Professor of Government and Gordon R. Clapp Chair in American
Studies Washington University, B.A.;
University of Rochester, M.A.,
Ph.D. Interest(s): public policy, environmental public policy, Congressional politics

DIRECTORY

Karen A. Hoffmann (1998)
Associate Professor of English
Lawrence University, B.A.; Indiana University, M.A., Ph.D.
Interest(s): American and African-American literature

Eilene Hoft-March (1988)
Professor of French and Milwaukee-Downer College and College Endowment Association Professor
Carroll College, B.A.; University of California-Berkeley, M.A., Ph.D.
Interest(s): 20th-century and 21st-century French literature, evolution of the novel, life writing

Judith Humphries (2007)
Assistant Professor of Biology
The Queen's University of Belfast, B.S., Ph.D.
Interest(s): parasitology, zoology, immunology, physiology

Kathleen Isaacson (1977)
Reference Librarian and Library Systems Coordinator and Associate Professor
University of Wisconsin-Madison, B.A.; University of Wisconsin-Oshkosh, M.A.L.S.
Interest(s): reference, automation, numeric data bases

John Paul Ito (2004)
Assistant Professor of Music
Massachusetts Institute of Technology, B.S.; Boston University, M.Mus.; Columbia University, M.A., M.Phil., Ph.D.
Interest(s): music theory

Brenda Jenike (2004)
Assistant Professor of Anthropology
Pomona College, B.A.; University of California-Los Angeles, M.A., Ph.D.
Interest(s): anthropology of Japan, medical anthropology, cultural gerontology, gender ideology, psychological anthropology

Mark Jenike (2004)
Associate Professor of Anthropology
Harvard College, B.A.; University of California-Los Angeles, Ph.D.
Interest(s): behavioral ecology, human biology, nutritional anthropology, human evolution, reproductive ecology, anthropological demography

Kevin Bradley Johnson (2010)
Visiting Assistant Professor of German
Indiana University, B.A.; University of Washington, M.A., Ph.D.
Interests: 20th century German literature and culture, cinema and media studies, Austria and Central Europe, critical theory, Czech and Bohemian studies

Joy Jordan (1999)
Associate Professor of Statistics
Indiana University, B.A.; University of Iowa, M.S., Ph.D.
Interest(s): statistics education

Steven Jordheim (1981)
Professor of Music and Teacher of Saxophone
University of North Dakota, B.Mus.; Northwestern University, M.Mus.
Interest(s): saxophone, instrumental pedagogy, chamber music

Suzanne Jordheim (1989)
Lecturer of Music and Teacher of Flute
Lewis and Clark College, B.Mus.; Northwestern University, M.Mus.
Interest(s): flute, flute pedagogy, woodwind techniques

Jerri Kahl (1998)
Associate Director of Counseling Services and Lecturer in Psychology
University of Kansas, B.A.; University of Wisconsin-Oshkosh, M.S.E.
Interest(s): counseling, peer education, crisis intervention, victim advocacy

DIRECTORY

Tsvetanka Karagyozova (2009)
Assistant Professor of Economics
University of National and World Economy, M.A.; University of Colorado Denver, M.A.; University of Connecticut, Ph.D.
Interest(s): Financial, behavioral and macroeconomics, industrial organization, teaching and learning techniques

Catherine C. Kautsky (1987-2002, 2008)
Professor of Music and Teacher of Piano
New England Conservatory, B.M.; Juilliard School, M.M.; State University of New York-Stony Brook, D.M.A.
Interest(s): chamber music

Nick Keelan (1985)
Associate Professor of Music
Henderson State University, B.M.E.; University of Northern Colorado, M.Mus.
Interest(s): trombone performance, trombone pedagogy

Edmund Michael Kern (1992)
Associate Professor of History
Marquette University, B.A.; University of Minnesota, M.A., Ph.D.
Interest(s): early modern Europe, religious culture, Hapsburgs, Austria

Nabil Khawla (2008)
Instructor of French
University of Wisconsin-Madison, ABD; University of Oklahoma, M.A., Ph.D
Interest(s): Arabic language

Lena L. Khor (2009)
Assistant Professor of English
Middlebury College, B.A.; University of Texas at Austin, M.A., Ph.D.
Interest(s): Contemporary world Anglophone literature, human rights and humanitarian discourse, postcolonial studies, literary theory, cultural studies, film

Sara A. Kind (2010)
Instructor of Music

Maria Isabel Kisel (2010)
Postdoctoral Fellow of Russian

Andrew Knudsen (2003)
Associate Professor of Geology
Hamilton College, B.A., University of Idaho, Ph.D.
Interest(s): environmental mineralogy, low-temperature geochemistry

Bonnie Koestner (2001)
Associate Professor of Music
Lawrence University, B.Mus.; University of Wisconsin-Madison, M.Mus.
Interest(s): voice coach/accompanist

Julie Konik (2008)
Visiting Assistant Professor of Psychology
West Chester University, B.S., M.A.; University of Michigan, Ph.D.
Interest(s): Feminist Psychology, Quantitative Psychology

Kurt Krebsbach (2002)
Associate Professor of Computer Science
Lawrence University, B.A.; University of Minnesota, M.S., Ph.D.
Interest(s): artificial intelligence, automated planning, multi-agent systems, functional programming, music, zymurgy

Elizabeth Krizenesky (1999)
Instructor of Russian
Ripon College, B.A.
Interest(s): Russian language

Debbie Mindy Kupinsky (2010)
Uihelin Fellow of Studio Art

Ruth M. Lanouette (1992)
Associate Professor of German
Millersville State University, B.A.; University of Pittsburgh, M.A.; Princeton University, Ph.D.
Interest(s): Germanic linguistics, language pedagogy, history of German

DIRECTORY

Carol L. Lawton (1980)
Professor of Art History and Ottilia Buerger Professor of Classical Studies
Vassar College, B.A.; University of Pittsburgh, M.A.; Princeton University, M.F.A., Ph.D.
Interest(s): Greek and Roman art

Karen Leigh-Post (1996)
Associate Professor of Music and Teacher of Voice
Lawrence University, B.Mus.; University of Arizona, M.Mus.; Rutgers University, D.Mus.A.
Interest(s): vocal performance, opera

Frank C. Lewis (2000)
Director of Exhibits, Curator and Instructor in Art History
Emory and Henry College, B.A.; University of Chicago, M.A.
Interest(s): painting, photography, woodworking

Julie Lindemann (2000)
Assistant Professor of Art
University of Wisconsin-Madison, B.A.; Illinois State University, M.A.
Interest(s): Photography, New Media, Antiquarian Photographic Processes, Documentary Photography and Film, Experimental Film

Jerrold P. Lokensgard (1967)
Robert McMillen Professor of Chemistry
Luther College, B.A.; University of Wisconsin-Madison, M.A., Ph.D.
Interest(s): organic chemistry, especially the synthesis of naturally occurring compounds

Michael Robert Mahoney (2010)
Visiting Associate Professor of History

Nicholas C. Maravolo (1966)
Professor of Biology
University of Chicago, B.S., M.S., Ph.D.
Interest(s): physiology of plant growth and development

Douglas S. Martin (2007)
Assistant Professor of Physics
Pomona College, B.A.; University of Texas, Ph.D.
Interest(s): biological physics, molecular motors, cytoskeleton

Carol Mason
Adjunct Professor of Anthropology

Andrew Mast (2004)
Associate Professor of Music and Director of Bands
University of Iowa, B.Mus., D.M.A.; University of Minnesota, M.A.
Interest(s): wind ensemble and band, music education

John S. Mayrose (2008)
Lawrence Postdoctoral Fellow of Music Composition
University of S. Carolina, B.M., Duke University, A.M., Ph.D.
Interest(s): music composition, computer music, guitar and electric bass performance

Susan McAllister (2010)
Lecturer of Music

Stephen McCardell (1999)
Instructor of Music
Lawrence University; Mannes College of Music, B.Mus., M.Mus.
Interest(s): music theory, composition

Susan L. McCardell (2000)
Lecturer of Music and Teacher of Bassoon
Lawrence University, B.Mus.
Interest(s): bassoon

David E. McGlynn (2006)
Assistant Professor of English
Ph.D. University of Utah English Literature and Creative Writing, 2006 M.F.A. University of Utah Creative Writing: Fiction, 2001 B.A. University of California, Irvine English and Philos

DIRECTORY

Randall McNeill (1999)
Associate Professor of Classics
Harvard University, A.B.; Yale University, M.A., Ph.D.
Interest(s): literary self-presentation, Roman poetry, Greek and Roman history

Julie McQuinn (2003)
Associate Professor of Music
Oberlin College, B.A., B.Mus.; New England Conservatory; University of Illinois, M.Mus.; Northwestern University, Ph.D.
Interest(s): musicology

Gerald I. Metalsky (1992)
Professor of Psychology
University of California-Berkeley, B.A.; State University of New York at Stony Brook, M.A.; University of Wisconsin-Madison, Ph.D.
Interest(s): origins of psychopathology, cognition and emotion, psychodiagnostics, psychotherapy

Joanne Metcalf (2001)
Associate Professor of Music
University of California-Santa Barbara, B.A.; Duke University, M.A., Ph.D.
Interest(s): music composition

Patrice Michaels (1994)
Professor of Music
Pomona College, B.A.; University of Minnesota, M.F.A.
Interest(s): voice, opera theatre

Leslie Outland Michelic (2000)
Lecturer of Music and Teacher of Oboe
University of Wisconsin-Milwaukee
Interest(s): oboe

Matthew C. Michelic (1987)
Associate Professor of Music and Teacher of Viola
University of Wisconsin-Milwaukee, B.F.A.; Indiana University, M.Mus.
Interest(s): viola, chamber music, theory

Brigetta F. Miller (1996)
Associate Professor of Music
Lawrence University, B.Mus.; Silver Lake College, M.Mus.
Interest(s): elementary and secondary education, multicultural education

Michael D. Mizrahi (2009)
Assistant Professor of Music
University of Virginia, B.A.; Yale School of Music, M.Mus., D.Mus.A.
Interest(s): Chamber music, piano literature, contemporary music, music history, music education

Kirk D. Moss (2010)
Associate Professor of Music
University of Michigan, B.Mus.; University of Cincinnati College-Conservatory of Music, M.Mus.; University of Florida (Gainesville), Ph.D.
Interest(s): Music education, conducting, string pedagogy

Juan G. Navea (2009)
Assistant Professor of Chemistry
Universidad Central de Venezuela, Caracas, B.S.; Baylor University, Ph.D.
Interest(s): Study of photochemical interactions between solar radiation and aerosol particles on Earth and planetary atmospheres

Rob Neilson (2003)
Frederick R. Layton Professor of Art
College of Creative Studies, B.F.A.; University of North Carolina, Chapel Hill, M.F.A.
Interest(s): sculpture

Howard Niblock (1981)
Professor of Music and Teacher of Oboe
University of Michigan, B.A.; Michigan State University, M.Mus.; University of Wisconsin-Madison
Interest(s): oboe, theory, aesthetics

DIRECTORY

Chantal Norrgard (2008)
Lawrence Postdoctoral Fellow of History
University of Minnesota-Duluth, B.A.; University of Minnesota, Ph.D.
Interest(s): American Indian history and studies

Amy Nottingham-Martin (2010)
Lecturer of Freshman Studies

Shannon O'Leary (2008)
Lawrence Postdoctoral Fellow of Physics
University of Puget Sound, B.A.; University of Oregon, M.A., Ph.D.
Interest(s): experimental optics

Christopher V. Odato (2010)
Postdoctoral Fellow of Linguistics
Brown University, A.B.; University of Michigan, Ph.D.
Interest(s): Sociolinguistics, language variation, syntax, language ideologies

Michael T. Orr (1989)
Professor of Art History
University College London, B.A.; Cornell University, M.A., Ph.D.
Interest(s): medieval and Renaissance art

David J. Owens (2000)
Technical Director and Facilities Manager and Lecturer of Theatre Arts
New England College, B.A.
Interest(s): set design

Anthony P. Padilla (1997)
Associate Professor of Music
Northern Illinois University, B.Mus.; Eastman School of Music, M.Mus., Performer's Certificate; University of Washington, Artist's Diploma
Interest(s): piano

Esther Palomino (1999)
Instructor of Spanish
Colegio San Jose, B.A.; Purdue University, M.A.
Interest(s): Spanish literature

Alan E. Parks (1985)
Professor of Mathematics and Pieper Family Professor of Servant Leadership
University of Wisconsin-Madison, B.A., M.A., Ph.D.
Interest(s): application of mathematics, computer algorithms, dynamics

Ron F. Peck (2006)
Assistant Professor of Biology
Linfield College, B.S.; University of Wisconsin-Madison, Ph.D.
Interest(s): microbiology, evolution, genomics, assessing student learning in biology

Steve Peplin (2004)
Lecturer of Music
Berklee College of Music, B.A.
Interest(s): guitar, composition

Peter Neal Peregrine (1995)
Professor of Anthropology
Purdue University, B.A., M.S., Ph.D.
Interest(s): anthropological theory, evolution of complex societies, culture contact and culture change, integration of archaeology and ethnology

Rudolf V. Perina (2010)
Stephen Edward Scarff Memorial Distinguished Visiting Professor at Lawrence

Monte Perkins (1987)
Lecturer of Music and Teacher of Bassoon
University of Wisconsin-Madison, B.F.A.; Wisconsin Conservatory of Music, M.Mus.
Interest(s): bassoon, symphonic band

Brent Peterson (2002)
Professor of German
Johns Hopkins University, B.A.; University of Iowa, M.A.; University of Minnesota, Ph.D.
Interest(s): construction of national and ethnic identities; the intersection of historical fiction and history; the "long 19th century" 1789-1918; post-war, post-wall experiences of both Germanies

DIRECTORY

Brian Peter Piasecki (2010)
Lawrence Postdoctoral Fellow of Biology

Megan Pickett (2006)
Associate Professor of Physics
Cornell University, B.A.; Indiana University, M.A., Ph.D.
Interest(s): Formation of solar systems, black hole and neutron star dynamics, Jupiter formation

Janet Planet (2007)
Lecturer of Music
Interest(s): Interests: vocal jazz

Jerald Podair (1998)
Professor of History and Robert S. French Professor of American Studies
New York University, B.A.; Columbia University School of Law, J.D.; Princeton University, M.A., Ph.D
Interest(s): 20th-century American history, urban history, American race relations

Bryan Post (2004)
Lecturer of Music and Teacher of Voice
Oberlin College, A.B.; Oberlin Conservatory, B.Mus., M.M.
Interest(s): voice

Bruce H. Pourciau (1976)
Professor of Mathematics
Brown University, B.A.; University of California-San Diego, M.A., Ph.D.
Interest(s): optimization theory, analysis, philosophy of mathematics

Antoinette Powell (2002)
Music Librarian and Assistant Professor
St. Norbert College, B.Mus.; University of Wisconsin-Milwaukee; University of Pittsburgh, M.L.S.
Interest(s): music library

Keith Powell (2006)
Lecturer of Freshman Studies
SUNY-Stony Brook University, B.A., Carnegie Mellon University, M.Mus.
Interest(s): French horn performance, teaching, horn ensembles, composing for chamber music ensembles and orchestras

Kathy Privatt (1999)
Associate Professor of Theatre Arts and James G. and Ethel M. Barber Professor of Theatre and Drama
Central Missouri State University, B.S.E.; Southwest Missouri State University, M.A.; University of Nebraska, Ph.D.
Interest(s): American theatre

Lavanya M. Proctor (2010)
Visiting Assistant Professor of Anthropology
University of Delhi, B.A., M.A., M.Phil.; University of Iowa, M.A., Ph.D.
Interest(s): English-language ideologies, South Asia, gender, postcolonialism, education, globalization, anthropology of youth

Stewart C. Purkey (1985)
Associate Professor of Education and Bee Connell Mielke Professor of Education
Stanford University, A.B.; Reed College, M.A.; University of Wisconsin-Madison, Ph.D.
Interest(s): educational reform

Celia Barnes Rasmussen (2010)
Visiting Assistant Professor of English
College of William and Mary, B.A.; Indiana University, M.A.
Interests: eighteenth-century British literature, occasional writing, and self-writing; gender studies; philosophy and literature.

Bradford G. Rence (1979)
Professor of Biology
University of Iowa, B.A.; University of California-Berkeley, Ph.D.
Interest(s): neurobiology of invertebrates, behavioral rhythms

DIRECTORY

Gretchen M. Revie (1997)
Reference Librarian and Instruction Coordinator and Assistant Professor
Carleton College, B.A.; University of Wisconsin-Madison, M.A.
Interest(s): reference, interlibrary loan

Dane M. Richeson (1984)
Professor of Music
Ohio State University, B.Mus.; Ithaca College, M.Mus.
Interest(s): percussion

Melanie Richeson (2010)
Lecturer of Music

Monica Rico (2001)
Associate Professor of History
University of California-Berkeley, B.A., M.A., Ph.D.
Interest(s): early America; the American West; gender and environment

Benjamin Rinehart (2006)
Assistant Professor of Art
Herron School of Art, B.F.A.; Louisiana State University, M.F.A.
Interest(s): drawing, painting, printmaking, bookmaking, computer design

Michael Rivers (2010)
Teacher of Piano

Maryuri Roca (2010)
Visiting Assistant Professor of Chemistry
Universidad Central de Venezuela, B.S.; Baylor University, Ph.D.
Interest(s): Bioanalytical chemistry and nanotechnology

Thomas C. Ryckman (1984)
Professor of Philosophy
University of Michigan, Flint, B.A.; University of Massachusetts, M.A., Ph.D.
Interest(s): philosophy of language, philosophy of mind, metaphysics, epistemology, philosophy of art

Richard A. Sanerib Jr. (1976)
Associate Professor of Mathematics
St. Anselm College, B.A.; University of Colorado, M.A., Ph.D.
Interest(s): logic, algebra, topology, computers, minority education

Judith H. Sarnecki (1985-87; 1990)
Professor of French
Knox College, B.A.; Portland State University, M.A.T.; University of Iowa, M.A.; University of Wisconsin-Madison, Ph.D.
Interest(s): 20th-century French literature and theory, cinema, women authors, gender issues

Tomomasa Sasa (2010)
Visiting Assistant Professor of Japanese

Erica J. Scheinberg (2010)
Lecturer of Music
University of California, Berkeley, A.B.; University of California, Los Angeles, M.A., Ph.D.
Interests: Modernism, American music, popular music, history of recorded sound, medieval music, archival studies

Jodi Sedlock (2002)
Associate Professor of Biology
Loyola University, B.A., B.S.; University of Illinois-Chicago, Ph.D.
Interest(s): tropical diversity, community ecology, foraging behavior, conservation biology, small mammals, particularly bats

Jason Shaw (2008)
Visiting Assistant Professor of Mathematics
Arizona State University, B.A.; University of Arizona, B.S.; University of Colorado, Ph.D.
Interest(s): algebra

John A. Shimon (2000)
Assistant Professor of Art
University of Wisconsin-Madison, B.S.; Illinois State University, M.S.
Interest(s): Photography, New Media, Visual Culture, Antiquarian Photographic Processes, Documentary Photography and Film, Experimental Film

DIRECTORY

Arnold Shober (2006)
Assistant Professor of Government
Bradley University, B.A.; University of Wisconsin-Madison, M.A., Ph.D.
Interest(s): public policy, education, charter schools, federalism, state and local government, American political development

Stephen M. Sieck (2010)
Assistant Professor of Music,
Co-Director of Choral Studies
University of Chicago, B.A.; University of Illinois at Urbana-Champaign, M.Mus., D.Mus.A.
Interest(s): diction, vocal wellness, 20th century oratorio, compositional process

Laura Sindberg (2007)
Visiting Associate Professor of Music and Conductor of Wind Ensemble
University of Wisconsin-Milwaukee, B.A., M.A.; Northwestern University, Ph.D.
Interest(s): music education and community engagement, instrumental music education, professional development, teacher identity, conducting

Claudena Skran (1990)
Associate Professor of Government and Edwin & Ruth West Professor of Economics and Social Science
Michigan State University, B.A.; Oxford University, M.Phil., Ph.D.
Interest(s): international relations, international organizations, refugees

Anna M. Skrupky
Instructor of Music

Martyn Smith (2006)
Assistant Professor of Religious Studies
Prairie College-Alberta, B.Th.; Fuller Seminary, M.A.; Emory University, Ph.D.
Interest(s): Islam, medieval Arabic literature, religion and the environment

Linda Sparks
Teacher of Piano
Jacksonville State University, B.A.; University of Alabama, M.Mus.
Interest(s): piano literature vocal lit., theatre, film

Steven Spears (2004)
Assistant Professor of Music
University of Louisville School of Music, B.Mus.; The Juilliard School, M.Mus.
Interest(s): voice

Timothy A. Spurgin (1990)
Associate Professor of English and Bonnie Glidden Buchanan Professor of English
Carleton College, B.A.; University of Virginia, M.A., Ph.D.
Interest(s): 19th-century English literature, the novel, Dickens, literary criticism and theory

Asha Srinivasan (2008)
Assistant Professor of Music
Goucher College, B.A.; Peabody Conservatory of music-John Hopkins University, M.Mus. University of Maryland, D.Mus.A.
Interest(s): Acoustic, electronic, and multi-media composition; collaboration with other arts

Jeffrey M. Stannard (2001)
Associate Dean of the Conservatory and Associate Professor of Music
University of Iowa, B.Mus.; University of Michigan, M.Mus., D.Mus.A.
Interest(s): trumpet

Matthew R. Stoneking (1997)
Professor of Physics
Carleton College, B.A.; University of Wisconsin-Madison, Ph.D.
Interest(s): non-neutral plasma physics, magnetic confinement of neutral plasmas

DIRECTORY

Jay R. Stork (2008)
Visiting Assistant Professor of Chemistry
Buffalo State College, B.A.; University of California, Ph.D.
Interest(s): structural and synthetic inorganic chemistry

Fred Sturm (1977-91, 2002)
Kimberly-Clark Professor of Music and Director of Jazz Studies
Lawrence University, B.Mus.; University of North Texas; Eastman School of Music, M.Mus.
Interest(s): large jazz ensembles, jazz small groups, jazz composition/arranging, jazz theory/aural training, jazz pedagogy.

Kuo-ming Sung (1994)
Associate Professor of Chinese and Linguistics
National Taiwan University, B.A.; University of California-Los Angeles, M.A., C. Phil., Ph.D.
Interest(s): generative linguistics, comparative syntax, language pedagogy

Phillip A. Swan (2002)
Associate Professor of Music and Co-Director of Choral Studies
Concordia College, B.A.; University of Texas at El Paso, M.Mus.
Interest(s): choral conducting, music education, jazz

Mami Tanaka (2010)
Instructor of Japanese
University of Florida, B.A., M.A.
Interest(s): Second language acquisition, pragmatics, discourse analysis, sociolinguistics, Japanese linguistics

Rosa Tapia (2002)
Associate Professor of Spanish
Universidad de Grenada, B.A.; University of Delaware, M.A.; Pennsylvania State University
Interest(s): Spanish peninsular and Latin American literature, foreign language teaching methodology and applications of technology, literary theory, cultural studies, film

Hans Ternes (1968)
Professor of German
University of Illinois, B.A., M.A.; University of Pennsylvania, Ph.D.; University of Freiburg; University of Munich; University of Bucharest
Interest(s): 20th-century German literature

Jill G. Thomas (2010)
Director of Technical Services, Seeley G. Mudd Llibrary and Assistant Professor
Washington State University, B.S.; Simmons College, M.S.
Interest(s): Information architecture, metadata services, special collections, and the digital library

Peter John Thomas (2006)
Assistant Professor of Russian Studies
Northwestern University, B.A., M.A., Ph.D.
Interest(s): Russia, poetry, translation, philosophy, contemporary composers

Lee Tomboulian (2005)
Instructor of Music
University of Arkansas, B.A.; University of North Texas, M.M.
Interest(s): piano, jazz, composition

Kevin Tracy (2007)
Assistant Professor of Classics
Swarthmore College, B.A.; University of Pennsylvania, M.A., Ph.D.
Interest(s): classics, ancient philosophy

DIRECTORY

Timothy X. Troy (1997)
Professor of Theatre Arts and J. Thomas and Julie Esch Hurvis Professor of Theatre and Drama
Lawrence University, B.A.; University of Iowa, M.F.A.
Interest(s): directing, musical theatre

Thomas C.M. Truesdell (2010)
Lecturer of History
Hobart and William Smith Colleges, B.A.; University of Virginia, Ph.D.
Interest(s): Gilded Age and Progressive Era history and literature, World War I, folk and fairy tales, speculative fiction, mythology

Yudru Tsomu (2007)
Assistant Professor of History
Central University for Nationalities, A.A.; Beijing College of Education, B.A.; Harvard University, Ph.D.
Interest(s): Chinese and Tibetan history and culture, Sino-Tibetan relations

Matthew L. Turner (2010)
Lecturer of Music
Lawrence University, B.Mus.; New England Conservatory, M.Mus.
Interest(s): Improvisation, cello, piano, composition

Mark Urness (2003)
Associate Professor of Music and Teacher of String Bass
University of Northern Iowa, B.A.; University of Cincinnati College-Conservatory of Music, M.Mus.; University of Iowa
Interest(s): double bass, jazz

Mary F. Van De Loo (2002)
Instructor of Music and Teacher of Piano
Lawrence University, B.Mus.; University of Oklahoma, M.Mus.
Interest(s): piano

Gary T. Vaughan (2009)
Lecturer of Economics
Coleman Foundation Fellow 2009-2010
University of Wisconsin-Oshkosh, B.L.S; Silver Lake College, M.S.
Interest(s): Entrepreneurship, business finance, human resources, business management

Massimiliano Verita' (2005)
Instructor of Arabic
University of Bologna, B.A., M.A.
Interest(s): Arabic/African/Italian language and literature

Lifongo Vetinde (1996)
Associate Professor of French
Université de Yaoundé, Cameroun, B.A.; Université de Dijon, France; University of Oregon, M.A., Ph.D.
Interest(s): francophone African literature

Patricia Vilches (2000)
Associate Professor of Spanish and Italian
University of Illinois-Chicago, B.A.; University of Chicago, M.A., Ph.D.
Interest(s): Latin American literature and culture, Italian Renaissance literature

Dirck Vorenkamp (1997)
Associate Professor of Religious Studies
University of Tulsa, B.S.; University of Kansas, M.A.; University of Wisconsin-Madison, Ph.D.
Interest(s): Asian religions, Buddhism

Catherine S. Walby (2000)
Teacher of Piano and Lecturer of Music
Lawrence University, B.A., B.Mus.; University of Oklahoma, M.Mus.
Interest(s): piano

Nancy A. Wall (1995)
Associate Professor of Biology
Presbyterian College, B.S.; University of South Carolina, M.A.; Vanderbilt University, Ph.D.
Interest(s): pattern formation differentiation, neural development, cranio-facial development,

Thomas Washatka (2004)
Lecturer of Music
University of Wisconsin-Oshkosh, B.A.
Interest(s): saxophone

DIRECTORY

Matthew Wegehaupt (2008)
Instructor of Freshman and East Asian Studies
University of Wisconsin, B.A.; University of California, M.A.; University of Michigan, M.A.
Interest(s): gender studies, sexuality, East Asia, Korea, Buddhism

Ernestine Whitman (1978)
Professor of Music
Emory University, B.A.; New England Conservatory, M.Mus.; University of Wisconsin-Madison, D.M.A.
Interest(s): flute, theory

Jere Wickens (1988)
Assistant Dean of Faculty for Student Academic Services and Visiting Assistant Professor of Anthropology
Dartmouth College, A.B.; Indiana University, M.A., Ph.D.
Interest(s): archaeology and history of Greece

Robert F. Williams (2004)
Associate Professor of Education
Purdue University, B.A., B.S.M.E.; University of Colorado at Denver, M.A.; University of California-San Diego, M.S., Ph.D.
Interest(s): cognitive science; cognitive linguistics; gesture studies

Thomas J. Wright (2010)
Visiting Assistant Professor of Mathematics

Steven Wulf (2002)
Associate Professor of Government
Cornell University, B.A.; Yale University, M.A., M.Phil., Ph.D.
Interest(s): political philosophy, American politics, history of ideas

Nathan Wysock (2003)
Lecturer of Music
Illinois State University, B.Mus.; Eastman School of Music, M.Mus., D.M.A.
Interest(s): classical guitar

Jane Parish Yang (1991)
Associate Professor of Chinese
Grinnell College, B.A.; University of Iowa, M.A.; University of Wisconsin-Madison, Ph.D.
Interest(s): classical and modern Chinese literature, Chinese children's literature, foreign language pedagogy, translation

Richard L. Yatzeck (1966)
Professor of Russian
University of Wisconsin-Madison, B.A., Ph.D.; University of Chicago, M.A.
Interest(s): comparative literature, German and English literature

DIRECTORY

Emeriti Faculty

Minoo Adenwalla (1959)
Professor Emeritus of Government
University of Bombay, B.A.; Northwestern University, M.S., Ph.D.

Corry F. Azzi (1970)
Professor Emeritus of Economics
Lawrence University, B.A.; Harvard University, Ph.D.

Ruth T. Bateman (1953-87)
Associate Professor Emerita of Physical Education
Sargent College; Boston University, B.S.

Robert Below (1964-96)
Professor Emeritus of Music
University of Louisville, Mus.B., Mus.M.; Hochschule für Musik, Köln/Rhein

John R. Brandenberger (1968-2008)
Alice G. Chapman Professor Emeritus of Physics
Carleton College, B.A.; Brown University, Sc.M., Ph.D.

William W. Bremer (1969-98)
Professor Emeritus of History
Stanford University, B.A., Ph.D.; University of Wisconsin–Madison, M.A.

William A. Chaney (1952)
George McKendree Steele Professor Emeritus of History
University of California, Berkeley, B.A., Ph.D.; Society of Fellows, Harvard University

David M. Cook (1965-2008)
Professor Emeritus of Physics and Philetus E. Sawyer Professor Emeritus of Science
Rensselaer Polytechnic Institute, B.A.; Harvard University, M.S., Ph.D. **George**

Edward Damp
Associate Professor Emeritus of Music

Mark L. Dintenfass (1968-2006)
Professor Emeritus of English
Columbia University, B.A., M.A.; University of Iowa, M.F.A.

Franklin M. Doeringer (1972-2007)
Professor Emeritus of History
Columbia University, B.A., Ph.D.

Dorrit F. Friedlander (1951-93)
Professor Emerita of German
All Saints Episcopal College, University of Cincinnati, B.A., M.A.; University of Heidelberg

Peter A. Fritzell (1966-2003)
Professor Emeritus of Eng, and Patricia H. Boldt Professor of Liberal Studies
University of North Dakota, B.A.; Stanford University, M.A., Ph.D.

H. Hartmut Gerlach (1966-94)
Associate Professor Emeritus of German
University of Zürich; University of Tübingen; University of Göttingen; Indiana University, M.A., Ph.D.

Chong-do Hah (1961)
Professor Emeritus of Government
Indiana University, B.A., Ph.D.; University of Virginia, M.A

J. Michael Hittle (1966-2001)
Professor Emeritus of History and David G. Ormsby Professor Emeritus of History and Political Economy
Brown University, B.A.; Harvard University, M.A., Ph.D.

Joseph A. Hopfensperger (1952-90)
Professor Emeritus of Theatre and Drama; Director of Bjorklunden
Lawrence College, B.A.; Northwestern University, M.A.

DIRECTORY

Marjory Irvin (1947-87)
Professor Emerita of Music
Illinois Wesleyan University, Mus.B., Mus.M.; Juilliard School of Music; Aspen Institute of Music; American Conservatory; Indiana University

Cliffe D. Joel (1968-97)
Professor Emeritus of Chemistry
Pomona College, B.A.; Harvard University, M.A., Ph.D.

John Koopman (1960-94)
Professor Emeritus of Music
Drake University, B.Mus.Ed., M.Mus.Ed.; Indiana University

Michael J. LaMarca (1965-95)
Professor Emeritus of Biology
State University of New York-Albany, B.A.; The University of Chicago; Cornell University, Ph.D.

Jules N. LaRocque
Professor Emeritus of Economics

Robert Levy (1979-2005)
Professor Emeritus of Music
Ithaca College, B.S.; North Texas State University, M.M.E.

Jerrold P. Lokensgard (1967-2009)
Robert McMillen Professor of Chemistry
Luther College, B.A.; University of Wisconsin-Madison, M.A., Ph.D.

Hugo Martinez-Serros (1966-95)
Professor Emeritus of Spanish
University of Chicago, B.A.; Northwestern University, M.A., Ph.D.

Ronald J. Mason (1961-95)
Professor Emeritus of Anthropology
University of Pennsylvania, B.A.; University of Michigan, M.A., Ph.D.

Edwin H. Olson (1957-89)
Professor Emeritus of Psychology
Hamline University, B.A.; University of Denver, M.A., Ph.D.

John C. Palmquist (1968-96)
Professor Emeritus of Geology
Augustana College, B.A.; University of Iowa, M.S., Ph.D.

William J. Perreault (1971-2006)
Professor Emeritus of Biology
Siena College, B.A.; Adelphi University, M.S.; University of Michigan, Ph.D.

Mary H. Poulson (1964-93)
Professor Emerita of Physical Education
Valparaiso University, B.A.; Miami University, M.Ed.; Colorado State College

Mojmir Povolny (1958-92)
Professor Emeritus of Government
Masaryk University, Jur.D.; University of Paris; University of Chicago, Ph.D.

E. Dane Purdo (1955-91)
Professor Emeritus of Art
University of Michigan, B.A., M.A.; Cranbrook Academy of Art, M.F.A.; Royal College of Art, London

Theodore L. Rehl (1958-92)
Professor Emeritus of Music
Oberlin Conservatory of Music, Mus.B., Mus.M.; University of Southern California, Indiana University

Bradford G. Rence (1979-2009)
Professor of Biology
University of Iowa, B.A.; University of California-Berkeley, Ph.D.

Dennis Ribbens (1971-98)
Professor and University Librarian Emeritus
Calvin College, B.A.; University of Wisconsin–Madison, M.A., Ph.D.

Sumner Richman (1957-95)
Professor Emeritus of Biology
Hartwick College, B.A.; University of Massachusetts, M.A.; University of Michigan, Ph.D.

DIRECTORY

Ronald D. Roberts, Sr. (1963-93)
Professor Emeritus of Physical Education
University of Wisconsin-Madison, B.S., M.S.; Brigham Young University, Ph.D.

Robert M. Rosenberg (1956-91)
Professor Emeritus of Chemistry
Trinity College, B.S.; Northwestern University, Ph.D.

Theodore W. Ross (1966-99)
Associate Professor Emeritus of Geology
Indiana University, B.S., M.A.; Washington State University, Ph.D.

Kenneth R. Sager (1963-2001)
Professor Emeritus of Education
Lawrence College, B.A.; University of Wisconsin–Madison, M.A.; Harvard University

Judith H. Sarnecki (1985-87; 1990-2009)
Professor Emerita of French
Knox College, B.A.; Portland State University, M.A.T.; University of Iowa, M.A.; University of Wisconsin-Madison, Ph.D.

George R. Saunders (1977-2002)
Professor Emeritus of Anthropology
Claremont Men's College, B.A.; University of California, San Diego, M.A., Ph.D.

Ben R. Schneider (1955-83)
Professor Emeritus of English
Williams College, B.A.; Columbia University, M.A., Ph.D.; Cambridge University

Dan Sparks (1963-93)
Associate Professor Emeritus of Music
Cincinnati Conservatory of Music, B.Mus., M.Mus.; Eastman School of Music

John M. Stanley (1961-99)
Professor Emeritus of Religious Studies
Williams College; University of Colorado, B.A.; Pacific School of Religion, B.D.; Columbia University/Union Theological Seminary, Ph.D.

Mari Taniguchi (1961-2000)
Professor Emerita of Music and Teacher of Voice
Eastman School of Music, B.Mus., M.Mus., Artist's Diploma; student of Mario Basiola and Olga Ryss

Ronald W. Tank (1962-90)
Professor Emeritus of Geology
University of Wisconsin–Madison, B.S., M.S.; Indiana University, Ph.D.

Daniel J. Taylor (1974-2007)
Professor Emeritus of Classics
Lawrence University, B.A.; University of Washington, M.A., Ph.D.

Leonard L. Thompson (1965-66, 1968-95)
Professor Emeritus of Religious Studies
DePauw University, B.A.; Drew University, B.D.; The University of Chicago, M.A., Ph.D.

Arthur A. Thrall (1956-90)
Professor Emeritus of Art
University of Wisconsin–Milwaukee, B.S., M.S.; University of Wisconsin–Madison; University of Illinois; Ohio State University

Herbert K. Tjossem (1955-93)
Professor Emeritus of English
University of Minnesota, B.A.; The University of Chicago, M.A.; Yale University, Ph.D., University of Heidelberg

Allen C. West (1966-93)
Professor Emeritus of Chemistry
Princeton University, B.A.; Cornell University, Ph.D.

DIRECTORY

Administrative offices and officers

Office of the President
Jill Beck, president of the university
Michael Orr, special assistant to the president
Laurie Petrick, executive assistant to the president
Janice Ruechel, budget and special projects assistant to the president

Office of Research Administration
William Skinner, director of research administration

Office of the Provost and Dean of the Faculty
David Burrows, provost and dean of the faculty
Ruth Lanouette, associate dean of the faculty

Athletics and Recreation
Mike Szkodzinski, director of athletics; head coach of men's hockey
Byron Abram, assistant coach of football
Steve Amich, head coach of men's and women's fencing
Jason Anderson, head coach of baseball; assistant coach of football
Mike Barthelmess, associate head coach of football
Erin L. Buenzli, head athletic trainer; compliance coordinator
Joel DePagter, head coach of men's basketball; assistant director of athletics
Jason Fast, head coach of men's and women's cross country; head coach of men's and women's track
Drew Fleek, head coach of men's and women's swimming and diving; director of the Buchanan Kiewit Recreation Center; aquatics coordinator
Kevin Girard, head coach of men's and women's tennis; director of the Buchanan Kiewit Recreation Center
Chris Howard, head coach of football; director of weight room
Blake Johnson, head coach of men's and women's soccer; director of soccer
Chris Knapp, assistant coach of football; recruiting coordinator
Dennis Nagan, interim head coach of women's basketball
Ryan Petersen, head coach of golf; assistant coach of men's hockey; SAAC advisor
Lisa Sammons, associate head coach of women's soccer
Matt Schoultz, head coach of volleyball; assistant coach of softball
Kim Tatro, senior woman administrator; associate director of athletics; head coach of softball
Joe Vanden Acker, sports information director

Conservatory of Music
Brian Pertl, dean of the conservatory
Karen Bruno, director of the Lawrence Academy of Music
Jeffrey Stannard, associate dean of the conservatory

Instructional Technology
David L. Berk, director of instructional technology
Arno Damerow, instructional technologist

DIRECTORY

Library
Peter Gilbert, director of the library
Julie Fricke, reference and web services librarian
Kathleen Isaacson, library systems coordinator and reference librarian
Colette Lunday Brautigam, visual resources library supervisor
Cynthia M. Patterson, circulation services supervisor
Antoinette Powell, music librarian
Gretchen M. Revie, reference librarian and instruction coordinator
Jill Thomas, director of technical services

Off-Campus Programs
Laura Zuege, off-campus programs coordinator

Registrar
Anne S. Norman, registrar

Student Academic Services
Geoff Gajewski, associate dean of faculty for student academic services
Jere Wickens, assistant dean of faculty for student academic services
Cecile Despres-Berry, director of the Waseda program

> **Center for Teaching and Learning**
> Julie Haurykiewicz, director of the Center for Teaching and Learning

Wriston Art Center
Frank Lewis, director of exhibitions and curator of the Wriston Art Center
Leslie Walfish, gallery and collections assistant

Office of Business Operations
Brian Riste, vice president for business and operations
Steve Armstrong, director of information technology services
Sandy Isselmann, director of human resources
Dan Meyer, director of facility services
Dawn Rost, director of financial services

Office of Development and Alumni Relations
Calvin Husmann, vice president for alumni, development and communications
Alice Boeckers, executive assistant

Alumni and Constituency Engagement
Mark Breseman, associate vice president of alumni and constituency engagement
Jessa Dukelow, assistant director of alumni and constituency engagement
Linda Fuerst, alumni and constituency engagement volunteer coordinator
Sherri Immel, alumni and constituency engagement office coordinator
Lyndsay Sund, associate director of alumni and constituency engagement

DIRECTORY

Björklunden
Mark Breseman, associate vice president of alumni and constituency engagement

Communications
Sheree Rogers, director of communications

Development
Matt Baumler, assistant director of alumni and constituency engagement/events
Joseph Brooks, director of alumni and constituency engagement
Lucas A. Brown, director of research and advancement operations
Benjamin Campbell, associate director of annual giving
Erin H. Chudacoff, assistant director of alumni and constituency engagement/stewardship
Josh Dukelow, associate director of major and planned giving
Jennifer Foth, associate director of major and planned giving
Mary Ann Gast, associate director of research and advancement operations
Carrie Garczynski, associate director of annual giving
Cara Gosse, director of annual giving
Kate Hatlak, assistant director of annual giving
Dolores Howse, annual giving coordinator
Kerry Lang, assistant director of advancement operations
Nathan Litt, assistant director of major and planned giving
Stacy Mara, director of development
Jessica McKenzie, assistant director of corporate, foundation, and sponsored research support
Kathy Rechner, research analyst
Abby Scher, assistant director of major and planned giving
Barbara Stack, associate vice president of major and planned giving
Jenna Stone, director of corporate, foundation, and sponsored research support
Jenny Ziegler, associate director of annual giving

Office of Enrollment
Steven T. Syverson, vice president for enrollment, dean of admissions and financial aid
Nathan Ament, director of conservatory admissions
Ken Anselment, director of admissions
Paris Brown, admission counselor
Nicole Buenzli, associate director of admissions
Jennifer England, senior associate director of admissions
Chuck Erickson, assistant director of admissions
Lee Hanagan, electronic support and information specialist
Andrea Hendrickson, assistant director of admissions/West Coast regional representative
Sara Beth Holman, director of financial aid
Dustin Lee, admissions counselor
Teege Mettille, assistant director of admissions
Jessica Rafeld, associate director of financial aid
Carin Smith, senior associate director of admissions/Chicago regional representative

DIRECTORY

Office of Student Affairs and Dean of Students

Nancy D. Truesdell, vice president for student affairs and dean of students
Chris Conrad, residence hall director/residence life selection and training coordinator
Jody Fraleigh, projects manager
Kathleen Fuchs, director of counseling services
Dan Geddes, residence hall director/volunteer programs assistant
Gregory Griffin, Warch Campus Center director
Kyle Griffin, residence hall director/campus life services coordinator
Marianne Griffin, residence hall director/campus activities program coordinator
Kathleen Heinzen, director of the career center
Kristi Hill, director of the volunteer and community service center
Jerri Kahl, associate director of counseling services
Curt Lauderdale, assistant dean of students for campus life
Christina Martinez, residence hall director/center for teaching and learning programs assistant
Jonathan Meyer, security supervisor
Pa Lee Moua, assistant dean of students for multicultural affairs
Susan Muenster, R.N., director of health services
Patricia Plutz, internship coordinator
Scott Radtke, licensed professional counselor, Affinity Health System
Drew Ryan, residence hall director/health and wellness programs coordinator
Timothy Schmidt, coordinator of international student services
Julie Severance, Bon Appétit dining services general manager
Amy Uecke, associate dean of students for campus life
Paul Valencic, assistant director of counseling services/alcohol education coordinator
Rose Wasielewski, residence hall director/diversity center program coordinator

DIRECTORY

2010-11 Academic Year Calendar

FALL TERM (Term I)

September 7	Tuesday	Welcome Week commences Residence halls open for new students (8 a.m.)
September 10	Friday	First class meeting of Freshman Studies
September 10	Friday	Final advance registration for new students
September 11	Saturday	Residence halls open for returning students
September 13	Monday	First day of fall term classes
September 13-24		Registration & class change period
September 24	Friday	Last day to make class changes or select the S/U option for fall term classes
October 21-24	Thur-Sun	Mid-term reading period
October 29	Friday	Last day to withdraw from fall term classes
November 18	Thursday	Last day of fall term classes
November 19-20	Fri-Sat	Reading period
November 21-23	Sun-Tues	Final examinations
November 24	Wednesday	Residence halls close (noon)

WINTER TERM (Term II)

January 2	Sunday	Residence halls open (9 a.m.)
January 3	Monday	First day of winter term classes
January 3-14		Registration & class change period
January 14	Friday	Last day to make class changes or select the S/U option for winter term classes
January 17	Monday	Martin Luther King, Jr. Day (no classes)
February 10-13	Thur-Sun	Mid-term reading period
February 18	Friday	Last day to withdraw from winter term classes
March 9	Wednesday	Last day of winter term classes
March 10	Thursday	Reading period
March 11-13	Fri-Sun	Final examinations
March 14	Monday	Residence halls close (noon)

SPRING TERM (Term III)

March 21	Monday	Residence halls open (9 a.m.)
March 22	Tuesday	First day of spring term classes
March 22-April 4		Registration & class change period
April 4	Monday	Last day to make class changes or select the S/U option for spring term classes
April 28-May 1	Thur-Sun	Mid-term reading period
May 6	Friday	Last day to withdraw from spring term classes
May 27	Friday	Last day of spring term classes
May 28-29	Sat-Sun	Reading period
May 30	Monday	Memorial Day (no classes)
May 31-Jun 2	Tues-Thur	Final examinations
June 3	Friday	Residence halls close for underclassmen (noon)
June 5	Sunday	Commencement
June 5	Sunday	Residence halls close for seniors (6 p.m.)

DIRECTORY

2011-12 Academic Year Calendar

FALL TERM (Term I)

September 6	Tuesday	Welcome Week commences Residence halls open for new students (8 a.m.)
September 9	Friday	First class meeting of Freshman Studies
September 9	Friday	Final advance registration for new students
September 10	Saturday	Residence halls open for returning students
September 12	Monday	First day of fall term classes
September 12-23		Registration & class change period
September 23	Friday	Last day to make class changes or select the S/U option for fall term classes
October 21-24	Thur-Sun	Mid-term reading period
October 28	Friday	Last day to withdraw from fall term classes
November 17	Thursday	Last day of fall term classes
November 18-19	Fri-Sat	Reading period
November 20-22	Sun-Tues	Final examinations
November 23	Wednesday	Residence halls close (noon)

WINTER TERM (Term II)

January 1	Sunday	Residence halls open (9 a.m.)
January 2	Monday	First day of winter term classes
January 2-13		Registration & class change period
January 13	Friday	Last day to make class changes or select the S/U option for winter term classes
January 16	Monday	Martin Luther King, Jr. Day (no classes)
February 9-12	Thur-Sun	Mid-term reading period
February 17	Friday	Last day to withdraw from winter term classes
March 9	Friday	Last day of winter term classes
March 10-11	Satu-Sun	Reading period
March 12-14	Mon-Wed	Final examinations
March 15	Thursday	Residence halls close (noon)

SPRING TERM (Term III)

March 25	Sunday	Residence halls open (9 a.m.)
March 26	Monday	First day of spring term classes
March 26-April 6		Registration & class change period
April 6	Friday	Last day to make class changes or select the S/U option for spring term classes
May 3-6	Thur-Sun	Mid-term reading period
May 11	Friday	Last day to withdraw from spring term classes
May 28	Monday	Memorial Day (no classes)
June 1	Friday	Last day of spring term classes
June 2-3	Sat-Sun	Reading period
June 4-6	Mon-Wed	Final examinations
June 7	Thursday	Residence halls close for underclassmen (noon)
June 10	Sunday	Commencement
June 10	Sunday	Residence halls close for seniors (6 p.m.)

DIRECTORY

Directions to Lawrence

From Chicago, bypassing Milwaukee
I-94 north from Chicago joins I-894 south of Milwaukee. I-894 joins Highways 45 and 41 north of Milwaukee. Continue north on Hwy. 41 to Appleton. Take the College Avenue exit and proceed east four miles through downtown Appleton to campus.

From the Twin Cities
I-94 east to Hwy. 10 (Osseo, Wis.). Hwy. 10 east to Appleton, connecting with the Hwy. 441 bypass. Take the College Avenue exit and proceed west two miles to campus.

Driving times

Chicago (The Loop)	3.5 hours
Green Bay	30 minutes
Iowa City	5.5 hours
Madison	2 hours
Milwaukee	2 hours
Minneapolis/St. Paul	5.5 hours

Airlines to Appleton (Outagamie County Airport)
Allegiant Air via Las Vegas
Comair (Delta) via Cincinnati
Midwest Connect Airlines via Milwaukee
United Express via Chicago

Rental cars available at airport

Avis	920-730-7575	800-331-1212
Enterprise	920-832-8020	800-325-8007
Hertz	920-734-2032	800-654-3131
National/Alamo	920-739-6421	800-227-7368

Taxicabs

Appleton Neenah Menasha Taxi	920-733-4444	
Fox Valley Cab	920-734-4546	877-734-4546

Please click here for a map to campus.